REPORT RESUMES

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EMPLOYMENT STATUS AND CHARACTERISTICS OF HIGH SCHOOL DROPOUTS OF HIGH ABILITY.

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REPORT NUMBER HRD-042 PUB DATE SEP 66
REPORT NUMBER BR-5-0051
CONTRACT OEC-5-85-029
EDRS PRICE MF-$0.36 HC-$8.04 201P.

DESCRIPTORS- EMPLOYMENT PROGRAMS, *EMPLOYMENT LEVEL, HIGH SCHOOL STUDENTS, SCHOOL HOLDING POWER, *DROPOUT RESEARCH, *DROPOUT IDENTIFICATION, ACADEMIC PERFORMANCE, *GIFTED, EDUCATIONAL PROGRAMS, *IDENTIFICATION TESTS, UNIVERSITY PARK, PENNSYLVANIA

HIGH SCHOOL DROPOUTS OF HIGH ABILITY WERE STUDIED TO OBTAIN INFORMATION ABOUT THIS PARTICULAR SEGMENT OF THE DROPOUT POPULATION. SPECIFIC OBJECTIVES WERE TO (1) DETERMINE THEIR EMPLOYMENT STATUS, (2) DETERMINE THEIR PATTERN OF INTEREST AND PERSONALITY, (3) SUGGEST OCCUPATIONAL FIELDS FOR WHICH TRAINING PROGRAMS SHOULD BE DEVELOPED, AND (4) PROVIDE DATA TO CONSTRUCT AN INSTRUMENT FOR IDENTIFYING STUDENTS WHO WOULD BENEFIT FROM THE PROPOSED TRAINING PROGRAMS. THE SUBJECTS WERE 125 MALE AND 81 FEMALE DROPOUTS AND A LIKE NUMBER OF MALE AND FEMALE PERSISTERS OF COMPARABLE INTELLIGENCE, NEIGHBORHOOD, AND GRADE LEVEL. THE INFORMATION GATHERED WAS PRESENTED UNDER SEVERAL HEADINGS WHICH INCLUDED DESCRIPTIVE INFORMATION, REASONS FOR WITHDRAWAL, CURRICULUM ENROLLMENT, SCHOOL TRANSFER, POST SCHOOL ACTIVITIES, FURTHER EDUCATION, OCCUPATIONAL GOALS, OCCUPATIONAL LEVEL OF PARENTS, EDUCATIONAL LEVEL OF PARENTS, DROPOUT PREDICTION KEYS, AND AN ATTITUDE INVENTORY. SUCH FREQUENTLY MENTIONED CORRELATES OF SCHOOL WITHDRAWAL AS FREQUENT SCHOOL TRANSFERS, EARLY PART-TIME EMPLOYMENT, UNEMPLOYMENT UPON LEAVING SCHOOL, GENERALLY LOW PARENTAL EDUCATION, AND LOWER PARENTAL EMPLOYMENT STATUS WERE NOT SUBSTANTIATED IN THE FINDINGS OF THIS STUDY. WHAT WAS FOUND WAS THAT DROPOUTS DIFFER FROM PERSISTERS IN SUCH AREAS AS PERSONALITY, WILLINGNESS TO CONFORM, INTERESTS, EDUCATION SKILLS, AND FAMILY ORIENTATION TOWARD SCHOOL. (AL)

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5-0051

FINAL REPORT
Contract No. OE-5-85-029

HRD-042

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THE PENNSYLVANIA STATE UNIVERSITY · 1855 ·

September 1966

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

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EMPLOYMENT STATUS AND CHARACTERISTICS OF HIGH SCHOOL DROPOUTS OF HIGH ABILITY

Contract No. OE-5-85-029

Joseph L. French and Bartell W. Cardon
Principal Investigator Executive Officer

September 1966

The research reported herein was performed pursuant to a contract with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

The Pennsylvania State University
University Park, Pennsylvania

Acknowledgments

Deep felt thanks are extended to the many individuals who made this study possible. Since the subjects were the most important people in this research, we first acknowledge the cooperative and friendly spirit of the youth who withdrew from school and their neighbors who persisted in school attendance. Of nearly equal importance was the contribution of school personnel who conscientiously and faithfully tested and interviewed the dropouts and persisters. The names of these "field representatives" appear in Appendix G.

To the 93 per cent of the chief administrative officers of secondary schools in the Commonwealth who provided data for the statewide survey in Phase One of the project and to those who made it possible for field representatives to gather data in Phase Two, we express great appreciation. To the seven per cent of the school administrators who did not respond to the survey we apologize for our inefficient requests.

In Philadelphia, Jules Grosswald and R. Lewis Rofman were of considerable help in organizing the collection of data during the initial survey and later in the more intensive study of selected dropouts and persisters.

A number of professional colleagues were of special help, and we remain particularly grateful to them. Among them were:

Dr. Robert Hayes of the Department of Public Instruction who provided advice about contacting school personnel, addresses of schools, enrollment data, and information about previous dropout studies in Pennsylvania.

Professor Raymond Cattell of the University of Illinois and Professor David Campbell of the University of Minnesota who came to University Park to consult with us about the results of the personality test and interest inventory employed.

Professor Jack Sparks of The Pennsylvania State University who acted as consultant on statistical procedures.

Professor George Brandon of The Pennsylvania State University who tried to keep us abreast of developments in Vocational Education and who translated our work to the State Board.

Dr. William Carriker, Head of the Department of Special Education; Dr. Harold Mitzel, Assistant Dean for Research, and Dr. Abram Vander Meer, Dean of the College of Education of The Pennsylvania State University; made many vitally necessary time and other essential arrangements for the research team.

The roster of the research team follows:

John Bonfield
Bartell Cardon
George DeSau
Joseph French
David Greenlund
George Hornbeck
Kenneth Satir
Marie Francia
Darlene Wiltanger
George Zurick

George DeSau pinch hit for the Executive Officer during the early stages of the project and was assisted by George Hornbeck and David Greenlund, graduate assistants, and Marie Francia, secretary. John Bonfield and Kenneth Satir were research assistants during later stages of the project. George Zurick was especially helpful in receiving, filing, and processing data throughout the project. In addition, Mr. Zurick offered valuable suggestions and assistance in analyzing the collected data. Mrs. Wiltanger performed the duties of secretary and office manager during the final 15 months. Her patience, humor, not-so-subtle advice, and dedication to the project were always appreciated.

J.L.F.
B.W.C.

University Park, Pennsylvania
September, 1966

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Chapter One

INTRODUCTION

"Our country's freedom and security are threatened when its youth are not educated to their maximum potential" (Warner, 1964). The tremendous waste involved when a boy or girl drops out of school prematurely effects all citizens in the form of increases in welfare costs and many other burdens to the economy. The greatest loss, however, is to the individual; he often is restricted in development and his contribution of talent to our way of life is thereby reduced. Restrictions placed upon the dropout often result in a lifetime of vocational activity which is neither challenging nor appealing to the individual. The loss of an opportunity for self realization, therefore, is one of the most devastating aspects of the nation's dropout problem.

Much has been written about school dropouts. An article published in 1872 and entitled "The early withdrawal of pupils from school: its cause and its remedies" (Harris, 1872) is probably the first on this particular topic. Since that time there has been a constantly increasing flow of reports. In fact, Blough (1956) in his doctoral dissertation analyzing selected research literature on the dropout problem listed nearly one thousand articles written between 1872 and 1956. And there have been numerous additional reports since then. In the face of this formidable mountain of research, why another study of dropouts?

For years, and in spite of research findings (or because of them), the stereotype generally held of a dropout has been that of a non-white male of low intellectual ability who flunked out of school. He was further characterized as the product of a broken lower-class home and believed to be either emotionally disturbed or socially maladjusted. Research findings of the last few years have shed much light upon this misconception. It is now general knowledge among the well informed, for example, that dropouts vary widely along such dimensions as intelligence, academic performance, race, socio-economic status, and so forth. Awareness that such individual differences do exist leads naturally to investigations of dropouts grouped along various dimensions. No longer are dropouts to be studied as a group. Renewed interest in early school withdrawal is especially appropriate at present in light of changing educational goals and values, improved research techniques, and a society which is rapidly becoming more and more complex.

Until about eight years ago little reported attention was directed to the intellectual level of the dropout. Van Dyke and Hoyt (1958) studied data from dropouts drawn from 73 Iowa schools and found that talented dropouts as a group differed from talented persisters as a group "on the basis of mean scores of high school grade point average, absenteeism, and participation in extra curricular activities, but not in terms of composite score on the ITED [Iowa Test of Educational Development] or occupational status of the father." Green (1962) reported data for 21 pairs of students from the same sample who had IQ's of at least 120. His findings paralleled those of Van Dyke and Hoyt.

From 1952 to 1957, the U. S. Department of Labor (1960) studied over 4,000 dropouts in seven communities and found six per cent of their sample to have IQs of 110 and above. Earlier, Wolfbein (1959) reported some data from this sample but did not show much differentiation between intellectual levels except to say that it was doubtful whether the dropouts represented a "strategic loss of potentially college trained personnel."

Several relevant articles appeared in 1961. The 1960 research memorandum by Stice (Woollatt, 1961) reported that 90 per cent of the most able one-third of some 9,700 high school sophomores tested across the nation in 1955 had graduated by 1959, suggesting a ten per cent dropout rate among these bright students. According to the New York State Holding Power Project (1961) which studied 12,855 students, ten per cent of those with IQs between 110 and 119 and two per cent of those with IQs of 120 and above left school during grades 10 and 12. Although reporting no research of her own, Vogel (1961) reviewed programs in six cities and reported that ten per cent of the dropouts had IQs of 110 or more. Also, in 1961, the Saint Paul Public Schools reported that 32 per cent of the 2,351 dropouts leaving school during the late 1950's had IQ's of 110 and above.

In 1962, Tucson schools (Tucson Community Council, 1962) reported 15 per cent of their 669 recent dropouts to have IQs of 110 and above.

Six publications appeared in 1963 in which dropouts were classified by intellectual level. The proportions of dropouts with IQs of 110 and above reported as a result of statewide studies were 14 per cent in Utah (Warner, 1963), 11 per cent in Connecticut (Stoughton, 1963), and eight per cent in Ohio (Nachman, Getson, and Odgers, 1963). Similar data were found in three urban studies. Bridgeport, Connecticut, found 12 per cent (Silverstone, 1963); Kanawha (County), West Virgina, found 5 per cent (Peck, 1963); and Syracuse found 9 per cent (Salen and Miller, 1963).

Evaluation of three statewide studies, five studies conducted by city schools (Bridgeport, Kanawha, St. Paul, Syracuse, and Tucson) and one U. S. Department of Labor study involving seven communities that included 21,497 dropouts indicates that 2,434, or about 11 per cent, have IQs at or above the 110 level (Warner, 1964).

A more comprehensive study than any to date was conducted in Ohio in 1963. Nachman, Getson, and Odgers (1964) found 12,608 dropouts during the 1962-63 school year. Of these students, intelligence test data from more than 15 different tests were available for 10,019 students of which approximately eight per cent or 792 had IQs of 110 or above. They found approximately eight per cent in their pilot study which was conducted in 1961-62 with approximately 5000 students with IQs of that magnitude also.

The Ohio students were classified according to course of study: vocational, general, academic, and slow learner. Ninety one per cent of the dropouts were enrolled in the vocational or general courses of study. Eight per cent of the vocational student dropouts and six per cent of the general student dropouts had IQs of 110 and above. However, 42 per cent of the 195 academic student dropouts had IQs of 110 or above. Thirty one per cent or 138 of the dropouts of high ability had IQs of 121 or higher.

The Ohio study, as the others, was directed to implications and recommendations about dropouts in general rather than specific groups of dropouts, such as those with IQs of 110 and above. Now that their study is complete, Nachman and his colleagues recognize that it is not "appropriate to treat dropouts as a homogeneous group" (Nachman, et al., 1964).

As approximately ten per cent of all students of high ability withdraw from school without graduating, it is surprising that so little research concern has been directed toward a careful investigation of bright dropouts.

The Pennsylvania study of dropouts of high ability was designed to seek answers to a number of questions related to this particular segment of the dropout population. The objectives of the study are to 1) determine their employment status, 2) determine their pattern of interest and personality, 3) suggest occupational fields for which training programs should be developed, and 4) provide data from which an instrument can be constructed for identifying students who will benefit from the proposed training programs. Implications for improved programing for potential dropouts will be offered.

Chapter Two

METHOD

This project was divided into three overlapping phases. Phase One consisted of a statewide survey to determine the extent of the dropout problem among high ability youths during the 1964-65 school year and to determine some characteristics of that population. Phase Two involved drawing a sample of boys and girls from the population and studying them in greater detail. The results of both phases were summarized, related, and discussed in Phase Three. In this chapter the procedures employed in Phases One and Two will be presented. The data will be presented and discussed in later chapters.

Phase One

Phase One was initiated by obtaining a letter from George W. Hoffman, acting Superintendent of the Pennsylvania Department of Public Instruction, endorsing the project and encouraging secondary school principals to comply with a request from the Statewide Survey Office for a complete listing of all dropouts with recorded IQs of 110 and above within the Commonwealth of Pennsylvania. A packet of letters and forms (See Appendix A) was compiled and mailed to all public and private schools in the Commonwealth enrolling students in grades nine through 12,[1] or any combination thereof. The packet included: 1) the cover letter from the Superintendent of Public Instruction; 2) a statement from the principal investigator describing the project and explaining the procedure to be followed; 3) instructions for completing the dropout survey; 4) an example of a completed form; and 5) an expense voucher.

The original mailing date of survey materials was April 12, 1965. A follow-up letter (also found in Appendix A) was mailed on May 31. Even so, less than 50 per cent of the public and private schools had responded by the end of June, 1965. Telephone calls, letters, and personal visits resulted in response from an additional 45 per cent of the schools. Seven per cent of the schools did not respond. In many instances, the survey forms were incomplete and telephone calls were placed to the schools and/or the dropouts to secure the needed data. School personnel who were slow in responding usually had very few dropouts to report. Therefore, Phase Two was started several months before Phase One was concluded.

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[1] Ninth grade dropout information was not available from Philadelphia schools.

Phase Two

Ultimately, 1,721 names were submitted,[2] of which 55 per cent were females. The emphasis of the study (employment potential) strongly recommended that a disproportionately large number of male subjects should be included in the sample. Consequently, the subjects of the study were 125 male (16.3% of male dropout population) and 81 female dropouts (8.5% of female dropout population) and a like number of male and female persisters of comparable IQ, neighborhood, and grade. The dropout sample was drawn from all Pennsylvania boys and girls of IQ 110 and above known to have withdrawn from school during the 1964-65 school year for any reason other than illness, death or transfer to another school. Pregnancy was not considered an illness, although it was often classified as such on school records. The persisters were selected from students attending the schools at which the dropouts had previously been enrolled.

The mean IQ of the male dropouts was 117.6 (SD.=6.49) and that of the male persister 117.1 (SD.=5.33); the mean IQs of the female dropouts and persisters were 117.6 (SD.= 6.59) and 116.3 (SD.=5.71), respectively. The combined IQ's of the male and female dropouts ranged from 110 to 144; the range of male and female persisters was IQ 110 to 140. Intelligence testing was not part of this project. IQs derived from previously administered group tests were used. Although different intelligence tests were used in various schools, the tests administered in each school for persisters and dropouts were the same. The IQ used in this study was, therefore, the IQ available to school personnel before the dropouts left school.

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[2] A projected number of dropouts with IQs of 110 and above based on a 100 per cent response would be 1818, which represents 1.14 per cent of the estimated Pennsylvania 1964-65 school enrollment of grades nine through 12 with IQs of 110 and above.

Because pregnancy was used as a reason for withdrawal in many instances, it was decided that the females would be divided into two groups for comparative purposes; those who left school because of pregnancy and/or marriage (N=55) and those leaving school for other reasons (N=26). For brevity, the former group will be referred to as "married"and the latter group as "unmarried."

Upon securing permission from the chief administrative officers of selected school districts to proceed with the project, 61 field representatives (see Appendix G for names and locations) located geographically throughout the state, were enlisted to assist with testing and interviewing of the samples. The field representatives (37 males and 24 females) were mostly certified guidance counselors (N=52); five school psychologists and four principals also assisted. Of the 61 individuals, only three had obtained less than a master's degree; all had at least the bachelor's degree. The average number of years of professional experience was 15.6 for the men and 20.7 for the women. Lists of names of dropouts living within close proximity of the field representatives were prepared and forwarded to the counselors and school psychologists. The field representatives, in turn, contacted, tested, and interviewed the dropout and persister samples. The persister samples were selected by the field representatives to meet the specifications provided by the research staff.

Approximately 50 per cent of the dropouts listed were unavailable to the representatives. The primary reasons for this were: 1) the dropouts had moved from the area; 2) the dropouts had moved within the area, but had not left a forwarding address; 3) the dropouts had enlisted or had been inducted into the armed forces; 4) parents of the dropouts, especially of pregnant girls, refused to give permission for testing; 5) the counselors felt it best not to attempt contact with certain dropouts; and 6) some dropouts refused to participate. This last group was small because the monetary reimbursement offered for time spent in the project tended to overcome reluctance to cooperate. In a few cases the dropouts had returned to school and were no longer considered for inclusion in the study. An attempt was made to contact the servicemen by mail when forwarding addresses were available and several were ultimately tested. In two cases, testing was done within penal institutions.

Although the male and female samples are biased to the extent described above, they are representative of the subjects who can be located by and who will cooperate with school personnel. The extent to which those who move outside the state or within the state and do not leave a forwarding address differ from the subjects participating is not known. But some servicemen and some dropouts who moved within the state were contacted, either by the research staff or field representatives, and did participate in the study.

The test battery was composed of measures of personality, attitudes, and interest variables. The instruments were selected with the intent of obtaining as much meaningful information in as short a time as possible.

High School Personality Questionnaire (HSPQ). The HSPQ, based on Cattell's 16 PF test, was used as the primary measure of personality. It is a self-rating questionnaire consisting of 142 multiple choice items and measures 14 factors of independent dimensions of personality. One of the advantages of this machine scoreable instrument is that the responses are readily combined into factors and converted to profile form. A comprehensive description of the instrument can be found in the test manual (Cattell & Beloff, 1962). Differences on each factor (male dropouts vs. male persisters, female dropouts vs. female persisters, etc.) were statistically analyzed with a *t* test of mean differences (Walker & Lev, 1953).

Minnesota Vocational Interest Inventory (MVII). Vocational interests were measured with the MVII (Clark & Campbell, 1965). This instrument is designed primarily for use with persons who contemplate entering occupations which do not require a college degree. It is an inventory of non-professional interests, with the keys being empirically based upon the difference of interest patterns of specific occupational groups from the interest patterns of skilled tradesmen in general. It is composed of 158 triads (statements of interest) requiring a total of 316 responses, half of them "like" and half of them "dislike." Scores can be recorded on a profile sheet listing 21 Occupational Scale scores and nine Area Scale scores. Mean differences on each Occupational and Area Scale were analyzed in the manner recommended by Campbell (1965). In addition, a frequency analysis of extreme scores was made.

Student Information Blank (SIB). A two part SIB was administered to all dropouts and persisters. It was composed of 160 items, most of which came from a longer (394 item) Project

TALENT questionnaire of the same name. The selection of items was based on the appropriateness of the question content to the ultimate goals of the present study. In a few instances, the wording of the items was changed to make the responses more relevant. The availablity of Project TALENT data made it possible not only to compare dropouts with persisters on each item, but to compare Project TALENT youths with both dropouts and persisters on most items as well. Project TALENT data used for the present study represented a ten per cent sample (N=721 males and 988 females) of individuals falling within the upper 25 per cent of the Project TALENT twelfth grade population on the C-001, IQ Composite (Flanagan, et al., 1964). The IQ Composite was used because of its similarity to the group measures of IQ used for the selection of dropouts of high ability.

SIB Part I items were analyzed using a frequency chi square (Dixon & Massey, 1957); Part II items were analyzed by means of the Kolmogorov-Smirnoff Maximum Absolute Deviation Test (Walker & Lev, 1953).

Interview Schedule. A semi-structured interview was also included as part of the test battery. The interview covered many areas, some of which overlapped the formal test material. It was anticipated that the interviews would provide an indication of intensity of feeling, as well as a description of the circumstances leading to school withdrawal which might not be recognized in responses to the SIB, HSPQ, or MVII. (An interview schedule and most of one interview and portions of another interview are found in the Appendix.) Further, it was planned that the interview data would provide a pool of data that could be more thoroughly analyzed after the conclusion of the project.

Friends Interview Schedule. The field representatives were also asked to contact several friends of the dropouts (after having obtained permission of the dropouts to do so) by telephone and obtain information which would be used to verify information offered by the dropouts themselves.

Attitude Scales. Careful study of the taped interviews and the written summary reports suggested the need for additional measures of attitudes. In some instances the free flowing nature of the interview, which made it possible for interviewers to probe into areas which seemed important, made quantitative analysis very difficult. In other instances, the interviews were disappointingly sparse of meaning. As a result, a group of attitude scales was devised. The scales, most of the Likert type, covered attitudes toward planning, school and teachers, personal traits, and goals. There were also two scales related to how the testee believed others preceived him. It was necessary to mail the questionnaires to all dropouts and persisters who had been previously interviewed. A contingency analysis (Walker & Lev, 1963) was made for each item of the several scales.

Chapter Three

RESULTS

The data in this chapter will be presented in several sections. Descriptive data pertaining to dropouts of high ability collected primarily during Phase One and comparative data from earlier available dropout studies will be included in the first section. Information from Phase Two pertaining to employment and recent educational activity of the samples will be included along with population data, as applicable. In the following sections, the results from the testing and interviewing in Phase Two will be presented as they relate to patterns of interest and personality and to building a pool of items that may be used in future studies for identifying potential dropouts.

Descriptive Information

The recent campaign to reduce dropouts seems to have been especially effective in Pennsylvania, for a definite decrease in the number of dropouts has been noted. Only five years ago, 27 per cent of all students entering the ninth grade in Pennsylvania failed to graduate. Pennsylvania has been reducing that figure by about two per cent per year over the past five years. Comparative data for dropout studies are difficult to obtain, but studies of Pennsylvania dropouts were conducted for the 1956-57 and the 1962-63 school years (Table 1). In the 1956-57 school year 36,686 students withdrew without graduating, but only 23,723 withdrew in the 1962-63 school year even though more students were enrolled. Based on a composite figure derived from the literature, Pennsylvanians could expect to find 4,000 of their very intellectually able high school students withdrawing from high school during the 1964-65 academic year without graduating. Instead, only 1,721 dropouts were found who met the criteria of the present study. (A projection based on non-responding schools would add no more than 100 to the total figure.)

It should be pointed out that the 1,721 dropouts located in this survey represent only .27 per cent of the total school population in Pennsylvania grades nine through 12. In contrast to most of the literature cited earlier, only 7.8 per cent of the dropouts in Pennsylvania have IQs of 110 and above.

Table 1

Reasons for Withdrawal Without Graduation in Per Cent

	Category	all IQ levels		IQs 110 and above	
		1956-57*	1962-63**	1964-65***	
				Males	Females
1.	Over 17	39.2	61.5	54.2	56.4
2.	General work certificate	38.3	19.9	23.5	10.4
3.	Domestic permit	12.1	11.6	1.2	28.9
4.	Committed to institution	6.8	3.9	3.5	2.5
5.	Entering Armed Forces	3.6	3.0	12.3	0.1
6.	Other			5.3	1.7

*N=36,686 **N=23,723 ***N=1,721

Table 2

Number and Per Cent of Males and Females Enrolled in Grades 9-12 in Pennsylvania

(1964-65 Enrollment)

		Males	Females
Grade	N	%	%
9	164,664	50.8	49.2
10	165,654	50.4	49.6
11	155,779	50.1	49.9
12	152,792	49.7	50.3

Table 3

Pennsylvania Dropouts Listed by Last Grade of Enrollment

	Dropouts of all intellectual levels in 1962-63		Dropouts with IQs of 110 and above in 1964-65							
			Males				Females			
			Population		Sample		Population		Sample	
Grade	N	%	N	%	N	%	N	%	N	%
9	3024	15.1	28	3.7	6	4.8	36	3.8	1	1.2
10	7380	37.0	173	22.6	25	20.0	193	20.2	15	18.5
11	5889	29.5	304	39.6	52	41.6	386	40.5	33	40.7
12	3674	18.4	262	34.2	42	33.6	339	35.5	32	39.5
Totals			767		125		954		81	

In Tables 2 and 3 can be found the estimated 1964-65 enrollment in Pennsylvania and the last grade attended by the dropouts in this survey and some comparative data from the statewide dropout study conducted during the 1962-63 year without any reference to IQ. It is clearly evident from the data in Tables 2, 3, and 7 that the brighter students stay in school longer.

From the literature, it is obvious that in the general population more males than females withdraw from school without graduating. However, in this study considerably more females withdrew. Only 45 per cent of the dropouts in this study were males. This reversal was not evident in Philadelphia. Excluding Philadelphia, only 40 per cent of the dropouts were males. In Philadelphia 62 per cent of the dropouts were males, and this figure is more in keeping with estimates of dropouts from the entire intellectual continuum.

Reasons for Withdrawal

Previous investigators reporting through the Pennsylvania Department of Public Instruction have classified the reasons for withdrawal according to the six categories listed in Table 1. In this study, the personnel in the secondary schools were not asked to force the reasons into given categories, but instead, were asked merely to state them. The reasons given by school personnel were then classified by the research staff as found in Table 4. For comparison purposes, the categories of Table 4 were forced into the categories in Table 1. The reasons labeled"over 17" and "general work certificate" still categorize the boys fairly well, but it appears that the terms have included marriage and/or pregnancy in some studies. It can be observed that different reasons for withdrawal seem to exist between the sexes in the IQ range studied.

When a few counselors and principals were asked privately, most agreeed that the categories used for classifying dropouts are misleading. Nevertheless, the reasons presented in the tables are the reasons that have been officially listed by school personnel.

When the students who were interviewed were asked why they left school, the reasons given were often quite different from the reasons listed on the school records. Many of the male dropouts were asked directly or indirectly to leave. Perhaps the difference between school records and comments by dropouts

Table 4

Reasons for Withdrawal before Graduation Provided by School Personnel

(1965 Survey)

Reasons for withdrawal	Male				Female			
	All Dropouts		Interviewed Dropouts		All Dropouts		Interviewed Dropouts	
	N	%	N	%	N	%	N	%
To get a job (employ.cert.)	183	23.9	33	26.4	107	11.2	4	4.9
Needed at home (exemp.per.)	6	0.8	1	0.8	24	2.5	4	4.9
Passed required age	292	38.1	54	43.2	144	15.1	22	27.2
Military service	94	12.3	6	4.8	1	0.1	0	0.0
Had failing grades	25	3.3	1	0.8	6	0.6	1	1.2
Didn't like school	38	5.0	8	6.4	19	2.0	3	3.7
Was asked to leave	31	4.0	7	5.6	4	0.4	0	0.0
Pregnancy	0	0.0	0	0.0	227	23.8	13	16.0
Marriage	29	3.8	10	8.0	380	39.8	30	37.0
Illness	11	1.4	0	0.0	12	1.3	2	2.5
Institutionalization	17	2.2	1	0.8	1	0.1	0	0.0
Other*	32	4.2	4	3.2	24	2.5	1	1.2
Unknown**	9	1.2	0	0.0	5	0.5	1	1.2
Total	767		125		954		81	

*Speech difficulty, religious beliefs, family fight, etc.

**"I wish I knew," etc.

is explained by different perceptions being held by dropouts and school administrators or perhaps it is explained by hesitancy on the part of school personnel to list "was asked to leave" as a reason for withdrawal. In defense of the perception theory it should be explained that when an adult, in hopes of stimulating higher performance, tells an adolescent he will not have enough credits to graduate unless his grades improve, the adolescent often believes it is futile to continue. Instead of encouragaing the student to try harder or to try different approaches in school, the remark often encourages him to try elsewhere.

The data presented in Table 5 were obtained from the dropout samples in Phase Two. (The data were collected about one year after withdrawal from school when the attitude scales were mailed to all dropouts and persisters. One hundred two males and 80 females responded.) As can be seen, only 20 per cent of the males and unmarried females said that they withdrew because they did not like school. Of the boys, 18 per cent were asked to leave, 17 per cent wanted a job more than school, 11 per cent got married, and only five per cent mentioned passing the required age. It was not clear whether marriage forced the boys out of school by school regulations or by their own choice. Among the unmarried girls, the reasons for withdrawal were well divided; marriage was the principal reason given by the married girls.

Of the females in this study, approximately 64 per cent withdrew because they were either pregnant and/or intending to marry or were already married. This percentage looks large, as does the number 607, but statistics can be presented in several ways. The married female dropouts account for only .77 per cent of the total population of females in Pennsylvania secondary schools with IQs of 110 and above. Using data collected in 1963-64 by the Department of Public Instruction from the total student body, it is determined that pregnancy is found half as often among girls with IQs of 110 and above (i.e., girls in this study) as with girls with IQs of 109 and below. (These comparisons were computed on a proportional representation and based on the assumption that 75 per cent of the population will have IQs of 109 and below.) When viewed in this context, it should be recognized that although pregnancy and/or marriage accounts for about two thirds of the female dropouts with IQs of 110 and above, pregnancy and/or marriage

Table 5

Reasons for Leaving School as Listed by Dropouts

	MDO		FDO		FDOM	
	N	%	N	%	N	%
I graduated	3	2.9	1	4.0	0	0.0
I became ill	3	2.9	2	8.0	3	5.5
I got married	11	10.8	1	4.0	45	81.8
I was needed at home	7	6.9	3	12.0	0	0.0
I wanted to get a job	17	16.7	4	16.0	0	0.0
I did not like school	20	19.6	5	20.0	2	3.6
I had failing grades	6	5.9	3	12.0	1	1.8
I was asked to leave	18	17.6	2	8.0	1	1.8
I passed required age	5	4.9	2	8.0	0	0.0
Other	12	11.8	2	8.0	3	5.5
TOTAL	102		25		55	

occurs much less frequently among high school girls with IQs of 110 and above than among girls with IQs of 109 and below.

In the description of subjects in Chapter Two, it was noted that 55 of the 81 female dropouts were married and/or pregnant. Yet in Table 4 only 43 are listed as married or pregnant. The other 12 girls were listed by school officials as "passed the age" for attendance. The records for the 1963-64 survey may be subject to the same error. If so, females from the general population who were married before graduating would comprise a larger proportion than is indicated above.

Curriculum Enrollment

Enrollment by curriculum is summarized in Table 6. To obtain comparative data for all students enrolled in the secondary school, it was necessary to go back to the last school census in Pennsylvania which was in the 1959-60 school year. In contrast to dropouts in general, a greater proportion of the dropouts with IQs of 110 and above, and an even greater proportion of those with IQs of 120 and above (see Table 8) were enrolled in the college preparatory curriculum and fewer were from the general curriculum. Proportionally fewer high ability male dropouts were from the vocational curriculum than were dropouts of all ability levels. More high ability females from the commercial curriculum withdrew than figures for dropouts in general would suggest.

Even so, nearly twice as many high ability male dropouts were enrolled in the general and vocational curricula and considerably more high ability female dropouts were enrolled in the commercial curriculum than would be predicted from proportions of students enrolled in these programs.

School Transfer

It is suggested in some of the literature, that transfer of schools is a means of identifying a potential dropout. Among subjects in this study only 29 per cent of the male dropouts and only 33 per cent of the female dropouts transferred from one school to another. Male high school graduates transferred more often than the males in this study and female graduates moved as often as female dropouts.

Table 6

Curriculum Enrollment for Grades 9-12

	All Students 1959-60	All Male Dropouts 1962-63		All Female Dropouts 1962-63	
	%	N	%	N	%
College prep	38.3	502	5.1	406	5.7
Commercial	25.1	678	6.9	2662	37.4
Vocational	11.4	2780	28.3	683	9.6
General	25.2	5315	54.0	3032	42.6
Other	--	550	5.6	335	4.7

Dropouts with IQs of 110 and Above in 1964-65*

	Males				Females			
	Population		Sample		Population		Sample	
	N	%	N	%	N	%	N	%
College prep	146	26.0	28	27.2	235	28.3	18	31.6
Commercial	44	7.4	6	5.8	421	50.8	21	36.8
Vocational	124	20.8	23	22.3	16	1.9	4	7.0
General	276	46.2	46	44.7	150	18.1	14	24.6
Other	7	1.2	0	0.0	7	0.8	0	0.0
Total	597		103		829		57	

*Philadelphia dropouts were not reported by curriculum.

Table 7

High Ability and Very High Ability Dropouts Listed by Last Grade of Enrollment

	Males				Females			
	IQ 110-119		IQ 120+		IQ 110-119		IQ 120+	
Grade	N	%	N	%	N	%	N	%
9	26	4.5	1	.5	28	4.3	8	2.7
10	132	23.0	41	21.8	137	20.7	56	19.5
11	217	37.8	85	45.3	263	39.8	120	41.3
12	199	34.7	61	32.4	232	35.2	106	36.5
	574		188		660		290	

Table 8

High Ability and Very High Ability Dropouts Listed by Last Curricular Enrollment*

	Males				Females			
	IQ 110-119		IQ 120+		IQ 110-119		IQ 120+	
	N	%	N	%	N	%	N	%
College Prep.	85	19.1	60	39.2	135	23.8	100	38.2
Commercial	34	7.6	10	6.5	300	52.9	121	46.2
Vocational	221	49.8	56	36.6	118	20.8	32	12.2
General	97	21.8	27	17.7	11	2.0	5	1.9
Other	7	1.7	0	0.0	3	0.5	4	1.5
	444		153		567		262	

* Philadelphia dropouts were not reported by curriculum.

Post School Activities

In Table 9 it can be observed that approximately 46 per cent of the males and approximately 48 per cent of the females who graduated from Pennsylvania Secondary Schools enter some kind of postgraduate educational program. It is quite possible that in a follow-up study, a short time from now, one would find a number of high ability dropouts to have entered some kind of post secondary school. In fact, in the limited amount of follow-up accomplished in Phase Two, several students have been found already enrolled in colleges (also see Table 14).

The "unknown" category in Table 9 is large, especially for males, and needs explanation. The method of collecting Phase One data in Philadelphia did not permit contacting dropouts or their families. This eliminated information about employment for 206 males and 125 females. In other communities, school personnel were unable in some instances and unwilling in other instances to get in touch with dropouts or their families to inquire about employment. Further, some school administrators were extremely reluctant to permit members of the research staff to contact dropouts unless permission from the dropouts was secured. Also, the data were based upon information received at the time of withdrawal from school. Information obtained from the samples participating in testing and interviewing is different from that found in Table 9 and will be discussed later in this section.

It should be noted, however, that while the school records suggest that less than 12 per cent of the males withdrew from school to enter military service (see Table 9), 29 per cent of those for whom employment status was known were in military service. Follow-up of students for additional interviewing revealed that even more students were away from home, and most were in military service. Perhaps there are more students entering the armed forces now due to the conflict in Viet Nam, or perhaps the percentage of these dropouts in the armed forces is larger because more of the students in this study are more available and able to qualify for service.

The next highest category for employment of males is "factory work or trades." This figure may be somewhat inflated since those that listed apprentice training were classified in the original tally as "factory work or trades."

Table 9
Post School Activities Based on School Reports

Activity	1963-64 Male H.S. Graduates		1964-65 Male Dropouts of High Ability		1963-64 Female H.S. Graduates		1964-65 Female Dropouts of High Ability	
	N	%	N*	%	N	%	N*	%
College or University	14,048	27.8			8,542	17.3		
State college	4,012	7.9			4,435	9.0		
Vocation or Trade School	2,527	5.0			1,710	3.4		
School of nursing	56	0.1			3,641	7.4		
Business school	1,045	2.1			3,079	6.2		
Other schools	1,427	2.8			2,031	4.1		
Post graduate	290	0.6			159	0.3		
Armed forces	7,606	15.0	151	29.4	276	0.6	1	0.1
Store employment	2,013	4.0	21	4.0	2,643	5.3	18	2.3
Office employment	1,139	2.3	9	1.8	9,903	20.0	11	1.4
Factory work or trades	4,794	9.5	114	22.2	2,401	4.8	43	5.5
Apprentice training	943	1.9			108	0.2	0	0.0
Agriculture work	1,305	2.6	25	4.9	25	0.1	0	0.0
Other employment	3,820	7.5	84	16.3	2,190	4.4	41	5.3
Remaining at home	2,593	5.1			4,901	9.9		
Married							511	65.6
Unemployed			88	17.1			150	19.3
All others	2,994	5.9	22	4.3	3,467	7.0	4	0.5
Unknown			253				175	
	50,612		767		49,511		954	

*based on subjects for whom employment status was determined(i.e., 514 and 779)

Data in the next few tables were obtained from the School and Work History forms and the attitude scales given to all dropouts in the samples near the end of the data collection period. One hundred two males and 80 females could be located a second time, but not all of them responded to every item. By the time this form reached them, most dropouts had been out of school at least a year.

As can be seen in Table 10, 95 per cent of the boys, 64 per cent of the unmarried girls and 48 per cent of the married girls held part or full time employment during this period. The first work was full time employment for 85 per cent of the boys and 52 per cent of the unmarried girls.

Sixty two per cent of the male dropouts had located a full time job before they left school or within a few days after leaving school, and more than 80 per cent had their first job within a month of withdrawal from school (Table 11). Job hopping or attempted upward vocational migration[3] can be observed in Tables 12 and 13. Sixty three per cent of the males held two or more jobs during their first year out of school and 40 per cent had three or more jobs. Part time jobs were held by more than a third of the male dropouts during the first non-school year.

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[3] Not all dropouts looked forward to upward vocational mobility. In fact, a few boys exhibited fierce pride in their work. John, a boy with an IQ well above 130 exploded when asked to classify his vocation:

> I will not degrade myself or my profession by letting anybody believe that a barber is a service worker! I'm sorry that you happened to class them that way but the surgeon you place in professional came originally from barber and at one time barbers were part of the clergy. Barbers today are trying to regain their lost respect and it certainly won't be done by disregard of our heritage. I suggest that you either move us up with the clergy and surgeons or move them down with "service workers."

Table 10

Full-time, Part-time Nature of Dropouts' Job after Leaving School

	MDO		FDO		FDOM	
	N	%	N	%	N	%
Full time (35 hours or more per week)	86	85.1	13	52.0	18	34.6
Part time (less than 35 hours per week)	10	9.9	3	12.0	7	13.5
I have not been employed since leaving school	5	5.0	9	36.0	27	51.9
TOTAL	101		25		52	

Table 11

Time Required by Dropouts to Locate First Full Time Job

	MDO		FDO		FDOM	
	N	%	N	%	N	%
Does not apply	7	7.0	10	41.7	26	55.3
Before I left	43	43.0	5	20.8	3	6.4
Less than a week	19	19.0	5	20.8	3	6.4
1-2 weeks	13	13.0	1	4.2	2	4.3
2-4 weeks	6	6.0	2	8.3	1	2.1
1-2 months	5	5.0	0	0.0	1	2.1
2-4 months	3	3.0	1	4.2	0	0.0
4-6 months	3	3.0	0	0.0	2	4.3
Over 6 months	1	1.0	0	0.0	9	19.1
TOTAL	100		24		47	

Table 12

Number of Full Time Jobs Held by Dropouts During First Year after Leaving School

	MDO	FDO	FDOM
None	6	11	26
One	32	8	17
Two	23	4	2
Three or more	40	2	0
Total	101	25	45

Table 13

Number of Part Time Jobs Held by Dropouts During First Year after Leaving School

	MDO	FDO	FDOM
None	62	19	22
One	33	4	8
Two	2	1	2
Three or More	0		1
Total	97	24	33

Further Education

The desire to help themselves through education is suggested in the responses of dropouts listed in Table 14. Only 13 men and 16 women did not plan to enroll in some educational activity. It still remains to be seen if all of the 34 men planning to enroll in an educational activity do so. At least, most of the subjects in this study are not so set against education that they would not consider a training program of some kind. Night school, correspondence study, and high school equivalency examinations were popular. The "other" category allowed for specification of vocational training.

Occupational Goals

The last question on the SIB asked the dropouts and persisters to mark the occupations in which they expected to be engaged as careers. The full set of data is presented in the Appendix with the SIB Part II questions. Few differences between persisters were noted. However, major differences between persisters and dropouts were noted. Twenty per cent of the male persisters and 43 per cent of the male dropouts anticipated a career as a skilled worker or foreman, and 59 per cent of the persisters and only 22 per cent of the dropouts anticipated a professional role. Thirty per cent of female persisters anticipated clerical work. This figure doubled the percentage of dropouts anticipating clerical work. While 56 per cent of the female persisters anticipated a professional career, only 15 per cent of the married dropouts and 35 per cent of the unmarried dropouts held such a view. On the other hand, 49 per cent of the married dropouts and 19 per cent of the unmarried dropouts, as contrasted with seven per cent of the persisters, viewed being a housewife as their career. The only other concentration of opinion involved 15 per cent of the unmarried dropouts who, to a greater extent than other females, envisioned careers as service workers, such as beauticians or waitresses.

The yearly income expected 20 years from time of testing and the least amount of yearly earnings that would be satisfactory in 20 years were the subjects of SIB Part II items 157 and 158. Complete data from Project TALENT, dropout and persister samples can be found in the Appendix with all SIB

Table 14

Post School Enrollment in Educational Activity

Activity	MDO	FDO	FDOM
Night School	19	5	5
Beauty School	0	4	3
Business School	2	0	0
Correspondence School	11	1	1
High School Equivalency	10	0	11
Jr. or Com. College	1	1	0
Armed Forces School	9	0	0
College offering bachelors degree	2	0	0
Other	6	0	1
Planning to enroll	34	8	18
Not planning to enroll	13	4	12
No reply	18	3	4
	125	26	55

Part II data. In general, women expected and would be satisfied with a smaller yearly income than men, the Project TALENT and persister samples expected more than the dropouts, and married female dropouts expected less than any other group. Interestingly, 84 per cent of the unmarried female dropouts anticipated a yearly income of $15,000 or less, but 16 per cent anticipated $22,500 or more. An equal percentage of the male dropouts and 26 per cent of males from Project TALENT expected a yearly income of $22,500 or more. (Time did not permit a careful analysis of the vocational plans of the nine females with high monetary expectations.) Most of the youth in all eight samples would be satisfied if they were earning $7,500 or less a year in 20 years, although their expectations were somewhat higher.

Occupational Level of Parents

Inquiry about occupational classification of parents was made with SIB Part II items 151 and 152. The dropout and persister samples were not significantly different from each other. The parents of the Project TALENT samples were more professionally oriented than either the parents of dropouts or persisters. Twenty four per cent of the Project TALENT sample labeled their fathers as proprietors or professionals, but such classifications for the other samples ranged from only five to eleven per cent. More than 50 per cent of the dropouts and persisters classified their fathers as workers, whereas only 32 per cent of the men and 38 per cent of the women in the Project TALENT sample classified their fathers as workers. Among the parents of dropouts and persisters there were more skilled workers than workers or laborers and more workers or laborers than semi-skilled workers. Whereas eight per cent of the men and five per cent of the women from Project TALENT listed their fathers as farmers, only two per cent of the men and four per cent of the women in this study specified farming as the occupation of their father.

Dropouts and persisters did not differ significantly in the occupational classifications assigned to their mothers. However, slightly more mothers of youth in this study had been employed during the past three years than mothers of the youth included in Project TALENT. The employed mothers of the subjects in this study were most often classified as clerical or semi-skilled workers. When compared with mothers of the subjects in Project TALENT, mothers of youth in this study were more often semi-skilled workers, less often professionals, and about equal on all other classifications.

Educational Level of Parents

The distributions of parental education for dropouts and persisters were not significantly different from each other. Parents of Project TALENT youth were reported to have somewhat higher educational attainment. The data can be found with SIB Part II items 153 and 154 in the Appendix.

For the most part, the first portion of this chapter has included descriptive data concerning the dropout population and dropout and persister samples. In the sections which follow the results obtained from tests, inventories, scales, and interviews will be presented.

Student Information Blank

Responses of male and female samples from Project TALENT to SIB items were obtained. It was assumed that these samples of boys and girls were representative of the nation's youth with IQs of 110 and above and that the persisters in the present study would not necessarily be a similar sample (i.e., representative of the nation) since they lived in the same neighborhoods as the dropouts. The second portion of this assumption was supported when it was observed that the two groups of persisters (i.e., Project TALENT and persister samples from this study) responded differently to more than one third of the SIB Part I items administered to both groups. The differences were significant at the .05 level or lower.

As a result, the Project TALENT data provide a unique comparison for this study. Not only can the dropouts and persisters be compared with each other, but each group can be compared with a representative national sample. Eight chi squares were computed for each item to which all groups responded. Of the 150 SIB Part I items, 20 were new or the wording was modified so as to make comparison with TALENT data impossible. Chi squares were used to ascertain the significance of the difference in response patterns on each item for the following groups:

1. Male TALENT vs. Male Persister
2. Male TALENT vs. Male Dropout

3. Female TALENT vs. Female Persister
4. Female TALENT vs. Female Dropout Married
5. Female TALENT vs. Female Dropout Unmarried
6. Male Persister vs. Male Dropout
7. Female Persister vs. Female Dropout Married
8. Female Persister vs. Female Dropout Unmarried

Items for which significant differences between groups in each of the eight comparisons above were demonstrated are found in the Appendix immediately following the SIB form. When significant differences between male persisters and male dropouts were found, it was assumed that the item would be helpful in the identification of male dropouts. When differences result from comparisons of Project TALENT with either dropouts or persisters, but not between dropouts and persisters, it was assumed that the responses would be faulty in their identification of male dropouts.

Differences found in comparison one (male TALENT vs. male persister) suggest differences between samples of persisters, i.e., one of the nation and the other purposefully selected for comparison with Pennsylvania dropouts. Differences found in comparisons of Project TALENT with dropouts and/or persisters were not assumed to be related to withdrawal from school. It is likely that without the persister group, most differences between Project TALENT and dropout samples would have been judged as relating to school dropouts. The data from the persister group on these items strongly emphasizes the need for a comparison group in studies of this kind. The differences found between Porject TALENT samples and persisters of this study may reflect characteristics of academic orientation, but many students possessing these characteristics remain in school. Also, these items may reflect regional differences.

Items yielding significant differences in each comparison or combination of comparisons between dropouts and persisters are found in Tables 15, 16, and 17. Responses characterizing dropouts and persisters are listed in separate columns. A few other differences significant at the .05 level or lower were found in addition to those listed, but they are assumed by the investigators to be related to experiences occurring after the time of school withdrawal rather than before. An example involves married female dropouts. They reported doing more chores

SIB Items which Differentiate Male Dropouts from Male Persisters

	Dropouts	Persisters		Dropouts	Persisters
3.	E		82.	A B	D
7.	A	E	83.	A B C	D E
9.	A	E	84.	A B	E
10.	A	D E	85.	A B	D E
14.		A	86.	A B	D E
17.	E		87.	A B	D E
18.	E		88.	A	E
19.	E		92.	A B	D E
21.	E		97.		E
23.	D E		105.	D E	B
24.	D E	A B C	106.	D E	B
25.		B	107.	D E	A B
28.	E	A B	108.	D E	A B
29.	E	A B	109.	D E	B
33.	E	A B	111.	D E	A
39.	A	E	112.	D E	A B
45.	B	D E	113.	A B C	D E
63.		B	117.	D E	B
64.		A	119.		B
65.	E	A	120.	B	A
72.	D E	A B C	121.	B	
75.	E		122.	B	
77.	A	D	123.	B	
78.	A	D E	131.	A	
80.	A B	D E			

SIB Items which Differentiate Married Female Dropouts from Female Persisters

	Dropouts	Persisters
2.	E	C
12.[a]		
17.	E	A C
18.	E	C
19.	E	C
20.	C	A
21.	E	C D
26.		
28.		
33.		
36.	B	A
39.	A C	D E
42.	E	
43.		C
44.	B	E
47.		A
56.	A	E
67.	A	
73.	B	D
78.	A B	D E
80.		
83.	A B	D E
85.		
86.	A C	D
87.		
88.		
95.		
105.		
106.		
107.		
108.	C D E	A
109.	C D E	A
113.	A	D E
119.		
120.		
122.	B	A
139.		
145.		
148.		
149.		
150.		

[a] numbers without a key designation indicate items for which significant differences were not found between the groups represented in this table but were observed between female persisters and the other group of female dropouts.

SIB Items which Differentiate Unmarried Female Dropouts from Female Persisters

	Dropouts	Persisters
2.[a]		
12.	E	A
17.		
18.		
19.		
20.		
21.		
26.	B C	E
28.	E	
33.	E	B
36.		
39.		
42.	E	
43.	D	C
44.		
47.		A
56.		
67.		
73.		
78.	A B	D E
80.	A	E
83.	A B	E
85.	A B	D E
86.	A	
87.	A C	D
88.	B	D E
95.	E	A
105.	D E	A B
106.	D	B
107.	D E	A B
108.	C D E	A B
109.	C D E	A
113.	A	D E
119.	C D	B
120.	B	A
122.		
139.	A	
145.	A	
148.	A	
149.	A	
150.	A	

[a] numbers without a key designation indicate items for which significant differences were not found between the groups represented in this table but were observed between female persisters and the other group of female dropouts.

around the house than did other samples. It was assumed that their answer reflects their current activities rather than the number of hours spent doing chores prior to withdrawal from school.

Of the 130 SIB Part I items used both in Project TALENT and this study, 46 differentiated the Project TALENT men from the men in this study and 48 differentiated the Project TALENT women from the women in this study, but did not differentiate persisters from dropouts. Since the items did not separate persisters from dropouts, they are considered to be a pool of items that suggest differences between the two samples, but not differences that are related to characteristics of dropouts. The numbers corresponding to the items are found in Table 18 and the actual items are located in the Appendix.

The items which were found to differentiate female dropouts from persisters have been divided into three groups; namely, 1) those related to married girls, 2) those related to non-married girls and 3) those related to both married and non-married girls. Significant differences at the .05 level or lower are reported for each group. Items differentiating all female dropouts from persisters are found in Tables 16 and 17.

Significant differences were not found for either boys or girls on the following items 22*,[4] 26*, 27*, 30*, 37*, 48*, 55, 69, 71, 76*, 93*, 94*, 115*, 125, 126, 128, 129, 130, 132, 137, and 140.

Differences reaching significance were not found for any of the comparisons between males on the following items: 5, 16, 20*, 67, 137, 141, 142, and 150.

No significant differences were found for any of the comparison groups of females for the following items: 23*, 24*, 25*, 32, 51, 53, 60, 61*, 68, 70, 90, 96, 121, 123, 124, 127, 133, 134, 135, 136, 143, and 146.

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[4] * indicates comparable data were not available for Project TALENT sample.

Table 18

SIB Items for which Chi Squares Significant at the .05 Level or Lower Suggested Differences between the Project TALENT Sample and the Samples in this Study.

1.	M		
2.	M		
4.	M	F	
6.		F	
7.		F	
8.	M	F	
10.		F	
12.	M		
13.	M		
14.			Fm
15.	M	F	
16.		F	
28.			Fm
31.	M		Fm
34.		F	
35.		F	
38.			Fm
40.	M	F	
42.	M		
46.			Fm
51.	M		
52.	M		
53.		F	
54.			Fm
56.	M		
57.	M	F	
58.		F	
62.	M		Fm
63.		F	
65.		F	
66.	M		
68.	M		
70.	M		
72.			Fm
73.	M		
79.	M		
81.	M	F	
82.		F	
89.	M		
90.	M		
91.	M		Fm
92.			Fm
96.	M		
98.	M		Fm
100.	M	F	
101.	M	F	
102.		F	
103.		F	
104.		F	
110.	M	F	
111.	M	F	
116.		F	
117.		F	
118.	M	F	
124.	M		
127.	M		
131.		F	
134.	M		
136.	M		
141.			Fm
143.	M		
144.	M	F	
145.	M		
146.	M		
147.	M		
148.	M		
149.	M		

M = male dropouts
F = unmarried female dropouts
Fm = married female dropouts

Dropout Prediction Keys

Each group of dropouts responded to the SIB somewhat differently. Items for which chi-square values were significant at the .05 level or lower have been identified for inclusion in keys which are hypothesized to identify potential dropouts from those who will remain in school until graduation. It remains for other projects to establish the validity of items in these keys. Sixty-seven items differentiate the male dropouts from the male persisters. Twelve of those 67 items were not used in Project TALENT, but the other 55 differentiated between dropouts and the Project TALENT subjects as well as persisters in this study. Of the 67, 49 are believed to have predictive capabilities and are listed as a persister-dropout key for males in Table 15.

Since married female dropouts presented a different pattern of response from the unmarried dropouts, two keys for the females were developed (Tables 16 and 17). Eight items were appropriate for both female keys and 14 additional items were added to the Married Female Key and 20 items were identified for the Unmarried Female Key. On each of the three keys the responses which were more typical of dropouts are found in the left-hand column and those more typical of persisters are found in the right-hand column.

Of the 49 items selected for the Male Dropout Key, only 16 appear on either female key. Of the 16, seven pertain to grades received. Of the 16, 15 are on the Unmarried Female Dropout Key and three are on the Married Female Dropout Key. The three items overlapping all scales involve grades in social science and English and the belief that they do not have much difficulty seeing things at a distance.

Of the 28 items on the Unmarried Female Dropout Key, more than half are in common with the Male Dropout Key. In addition to those items common to all scales, similarities between male and unmarried female dropout keys were noted in grades in subject areas other than social science and English, in membership in journalistic groups and religious or charitable organizations. in paying attention in class, in amount of school work done, and in several areas of health. In general, dropouts were in a less favorable position than persisters.

A dropout prediction score for a student responding to the SIB can be calculated by summing responses given which are typical of persisters and then substracting the number of responses given which are typical of dropouts. Positive scores are typical of persisters and negative scores suggest responses similar to those of the dropouts in this study.

The necessity for key validation on samples different from the sample on which the key is based is indicated by the data found in Table 19. These SIB data were collected in a western Pennsylvania high school from over 300 students enrolled in grade 12. SIB answer sheets were scored with the three keys described above except that in the formulation of the female "persister" and "early marriage" norms, scores were based upon the characteristics of persisters identified in Tables 16 and 17. The IQs for this cross-validation sample were determined from the administration of the Stanford-Binet with children thought to be eligible for a gifted child program when they were in the sixth grade. The norms determined from this one cross validation study suggest that brighter students earn higher (more positive) scores from the SIB Persister-Dropouts Keys than do students in general. Also, the 50th percentile for students with IQs in the normal range is near the breaking point (i.e., zero) between dropout and persister tendencies for the subjects in this study of youth with IQs of 110 and above.

Although much additional work must be done to develop a dropout-persister prediction system from SIB items, the items identified in Tables 15, 16, and 17 will be used as a basis for discussing data from this study pertaining to dropout and persister differences in autobiographical information.

What characteristics of dropouts are suggested by SIB items? In the discussion that follows the answer for males will be considered first and females second. The discussion will be based on items which differentiate between the dropouts and persisters, but in most instances, the items differentiate between dropouts and students in the Project TALENT study as well. Concluding this section will be a discussion of items which differentiate between Project TALENT respondents and the dropouts and/or persisters in this study but which do not differentiate between the dropouts and persisters.

Table 19

SIB Dropout Scale Norms
Based on Twelfth Grade Students in One Community

	Persister Scores for Males		Persister Scores for Females		Early Marriage Scores for Females	
	IQ below 127[a]	IQ above 127[b]	IQ below 127[c]	IQ above 127[d]	IQ below 127[c]	IQ above 127[d]
Percentile						
90	12	19	13	17	14	18
80	10		11		12	
75	8	16	10	14	11	16
60	4		8		8	
50	1	9	6	10	7	12
40	-4		4		5	
25	-7	5	1	8	3	9
20	-8		0		2	
10	-12	-3	-5	4	-1	6

[a] N=114 [b] N=33 [c] N=124 [d] N=36

Male Dropouts

With regard to extra curricular activities, male dropouts and persisters were very similar in their responses to 14 of 27 items. Dropouts participated more often than persisters in some activities such as making and repairing electrical equipment, repairing autos, and working with metal. However, the persisters participate much more often in such things as playing baseball, football or basketball; collecting stamps, coins, rocks, and insects; going bicycling; and going ice skating, skiing, or sleighing.

Persisters, more often than dropouts, raised or cared for pets, but neither group rejected the activity. Twenty-two per cent of the persisters and 10 per cent of the dropouts raised pets "very often" and 18 per cent of the persisters and 25 per cent of the dropouts "often" raised pets. Nearly another 25 per cent of each group "occasionally" raised pets.

Neither dropouts nor persisters engaged frequently in the following activities but persisters engaged in them more often than dropouts: attending concerts, lectures, plays or ballet; playing golf or tennis, playing hockey, lacrosse, handball or soccer, and participation in track and field events. No differences were observed in such stated activities as drawing, painting, acting, singing, building models, taking pictures, woodworking, cooking, swimming, boxing, wrestling, and horseback riding. Most of these activities were infrequently engaged in by both dropouts and persisters, with the exception of swimming. More than half of each group often went swimming.

Among the various organizational activities open to teenagers, three significantly differentiated dropouts from persisters. They were participation with journalistic groups, school subject matter clubs, and religious or charitable organizations. Sixteen per cent of the persisters and one per cent of the dropouts worked actively with school newspapers, magazines, or annuals; 78 per cent of the persisters and 97 per cent of the dropouts were not involved at all. Among the Project TALENT students, 25 per cent were fairly active and 69 per cent were not active at all.

Of the persisters, 24 per cent were active in subject matter clubs and 57 per cent were completely inactive, as contrasted with five and 87 per cent of the dropouts and 33 and 54 per cent of the Project TALENT sample.

In religious and charitable organizations, 33 per cent of the persisters were active and 39 per cent were not members; 15 per cent of the dropouts were active and 54 per cent were not members; and 57 per cent of the Project TALENT sample were active and 26 per cent were not members.

It is probable that the less frequent participation by dropouts in organizations is related to the low percentage of dropouts who were officers or committee chairmen. Sixty-three per cent of the dropouts, but only 29 per cent of the persisters and 26 per cent of the TALENT sample, never held any offices. Thirty-six per cent of the TALENT sample and 29 per cent of the persisters but only 12 per cent of the dropouts were officers three or more times in the past three years in numerous organizations in and out of school.

Responses to the home situation indicate that most dropouts spend less time on chores around the house than do persisters; 25 per cent of the dropouts, as contrasted with seven per cent of the persisters, spend 10 hours a week. The response of 10 or more hours a week may have come from dropouts who have established homes of their own rather than indicating a cause of dropout.

Reading activities. Few books are found in the homes of dropouts. More than half of the dropouts and persisters read some adventure and science fiction books and magazines, but less than half of either group read other fiction, science, plays, poetry, politics, religion, or love. The only differences noted in reading activities relate to the quantities of comic books and fashion magazines read. Thirty-nine per cent of the dropouts and 42 per cent of the persisters did not read a comic book in the past 12 months, but 48 per cent of the dropouts and 40 per cent of the persisters read four or more. Although the differences were statistically significant, they may not be of practical importance. More than three fourths of the dropouts and persisters did not read fashion or etiquette books or magazines, but 10 per cent of the dropouts, as contrasted with two per cent of the persisters, read four or more. It was a surprise to find a significant difference for this item among the men but not among the women.

Although reports of reading habits did not appear to be different for dropouts and persisters, the dropouts reported more magazines available in the home. Differences were noted in three types: men's or sports; movie, love or detective; and mechanics, electronics, aviation, or automobile. It is often hypothesized that the homes of persisters have more magazines. Apparently, it is not as much the number of magazines as much as the academic orientation in the magazines and the amount they are read.

School activities. Of the 26 items related to behavior in school, significant differences were found for 15. The responses suggest that persisters, more than dropouts, feel that they do a little more than teachers require. Persisters keep up to date on assignments and they believe that their grades reflect their ability fairly accurately. It was found, but not expected, that 32 per cent of the dropouts and only 12 per cent of the persisters considered themselves to be fast readers. Other items suggest that dropouts more than persisters: 1) feel that their courses do not help them prepare for an occupation; 2) have trouble with English composition; 3) feel that teachers regard their work as sloppy; 4) find classes uninteresting; 5) do not do their best work but only enough to get by; and 6) read material without really understanding what is read.

Male dropouts, but not female dropouts, differ from persisters in the number of specific courses completed. Male dropouts enrolled more often in commercial and vocational courses and less often in foreign languages and mathematics courses than persisters.

Grades reflect differences between dropouts and persisters in all except vocational subjects. Whereas a majority of the persisters reported mostly A's and B's or B's and C's, a majority of the dropouts reported mostly B's and C's or mostly C's and D's in mathematics, science, foreign languages, social studies, English and commercial courses.

In considering all courses starting with the ninth grade, 34 per cent of the persisters reported mostly A's and B's, and 50 per cent reported mostly B's and C's; but 40 per cent of the dropouts reported mostly B's and C's, 43 per cent reported mostly C's and D's, and seven per cent reported mostly D's or below.

Interestingly, only 27 per cent of the dropouts had not expected to graduate from high school. On the other hand, 14 per cent expected to graduate from a regular four year college. Only two per cent of the persisters did not expect to complete high school, and 64 per cent expected to graduate from college (half of this group anticipated graduate work). Nearly 90 per cent of the persisters would be willing to borrow money to pay for a college education.

Home conditions. The homes of dropouts and persisters did not differ in number of electrically operated power tools or the vintage of automobiles, but they did differ in the number of cars owned by the family (including brothers and sisters). Fifteen per cent of the dropout and persister families did not own a car. Forty-two per cent of the persister families owned one car, 33 per cent owned two cars, and 10 per cent owned three or more cars; 24 per cent of the families of dropouts owned one car, 32 per cent owned two cars, 30 per cent owned three or more cars. Although a means of verification is not available, it is considered possible that the high number of cars owned by families of dropouts could reflect a number of older siblings crowded into the home and/or tempting the dropouts to earn money to be able to drive their own car.

Health conditions. Generally, the persisters reported better health during the past three years with an almost equal per cent (38 and 37) reporting excellent health, but forty-six per cent of the persisters and 35 per cent of the dropouts described their health as very good and 15 per cent of the persisters and 23 per cent of the dropouts considered their health to be average. While feelings about health may reflect a generally less optimistic view by dropouts, more dropouts than persisters had been in bed for sickness or an accident for more than a week (50% vs. 32%). Fewer dropouts wore glasses (18% vs. 33%) and had difficulty seeing things from a distance (23% vs. 41%), but more dropouts had been knocked unconscious (47% vs. 33%).

Female Dropouts

Turning to the responses that separated female persisters from both groups of dropouts, it was found that the differences, in addition to those relating to course grades which characterize all dropouts, center around behavior in school. However, age of first earning money and permission to be messy with their belongings also separated the groups. In answering "As a child I could make a mess with toys, paint, or mud, or ..playthings," the persisters distributed themselves normally with 51 per cent responding "occasionally." The distribution of dropouts, however, was more rectangular, with only a quarter of the responses in the middle position.

Most girls were earning money for something by the time they were 13 or 14 years of age, and more than 90 per cent of the persisters were earning money by 16 years of age. However, about 25 per cent of the dropouts had not started earning money until they were 17 years of age or older.

More than half of the time, while in school, the girl dropouts found school work so uninteresting that they had difficulty focusing attention on it; persisters infrequently expressed a lack of interest. Dropouts, more than twice as often as persisters, missed assignments or had difficulty paying attention to what teachers said. However, 75 per cent of the dropouts did not think they missed assignments very often, and 60 per cent of them were able to keep their mind on what the teachers said at least half of the time. The corresponding per cents for persisters were 95 and 90.

About eight per cent of the persisters and 25 per cent of the dropouts said they had difficulty with English grammar. The reality of this feeling was reflected in course marks. Eighty per cent of the persisters reported grades of A or B in English; only 45 per cent of the dropouts earned grades that high. The difference in grades was even more noticeable in social studies. Seventy-five per cent of the persisters reported grades of A and B, while 75 per cent of the dropouts reported grades of C or lower in history and social science courses.

Unmarried Female Dropouts

When compared with the other groups of girls, the unmarried dropouts participated less in subject matter clubs and considerably less in religious or charitable organizations. This lack of participation may reflect their slightly greater mobility, but changes of schools were seldom closer than two years to time of withdrawal from school.

In regard to school work, the unmarried dropouts felt that their marks were lower because they did not pay attention in class but agreed that much of the time they tried to do only enough to get by (unless they really liked a course), that they did not fulfill their assignments daily, and that when they got behind there was little opportunity to catch up. The chi-square values for the last four items were significant beyond the .001 level when comparisons were made with female persisters. The attitude of unmarried dropouts toward class activity was reflected in their report of grades received. While dropouts reported lower grades in social studies and English, the male and unmarried female dropouts received considerably lower grades in mathematics, science, and foreign language courses as well. Whereas 64 to 68 per cent of the Project TALENT females and 36 to 54 per cent of the persisters reported that their grades were mostly A's and B's in mathematics, science, and foreign languages, only 16 to 22 per cent of the unmarried dropouts reported grades that high, and 42 to 54 per cent reported their grades to be mostly C's and D's or mostly D's or below in those three subjects.

Perhaps the physical condition of the unmarried female dropouts contributed both to their difficulty in producing more than the minimum requirements for their courses and/or contributed to their generally low grades. While 89 per cent of the Project TALENT females and 78 per cent of the persisters felt that their health had been "excellent" or "very good" during the past three years, only 28 per cent of the unmarried dropouts felt their health was that good, 64 per cent felt their health was "average," and eight per cent felt their health was "poor." Of the persisters, 70 per cent missed less than a week of school due to illness, while 46 per cent of the unmarried dropouts missed from a week to a month and 20 per cent missed more than a month. The unmarried dropouts caught more colds (50% vs. 28%) , had more spells of dizziness and faintness (54% vs. 31%), had more sore throats (50% vs. 31%), had more aches and pains (38% vs. 12%), and had more rheumatic fever (12% vs. 2%) than the persisters. However, a few more of the persisters had allergies (28% vs. 23%).

Married Female Dropouts

Married dropouts reported that they spent much more time cooking and doing chores around the house and that they had fewer books in the home than did persisters, but it is quite likely that these responses reflect beginning homemaking rather than dropouts symptoms. However, responses of married dropouts to a number of items did differentiate them from both unmarried female dropouts and persisters, and it is possible that the content of these items could have been recognized before school withdrawal.

More than half of the married dropouts never played an instrument, danced or acted in public, but 75 per cent of the girls in the comparison groups had performed in public. Similarly, the girls in the comparison groups, much more than the married dropouts: attended concerts, lectures, plays; visited art galleries or museums; swam, played golf, tennis, hockey, lacrosse, handball or soccer; and read more books. The term "books" did not include text books or comic books. Among the books and magazines that the married girls read are found significantly fewer news or pictorial magazines, plays, poetry, essays, and classics. Their other reading interests were not significantly different from girls in the comparison groups. Perhaps their reading habits are related to their belief that they, more than other girls, have difficulty expressing themselves in written reports, examinations, and assignments.

Similarities Among Sample Groups

Reports of physical characteristics were similar for all groups in that they felt their speech was easily understood, they have not had more trouble with their skin than others of their age, they hear well, they have normal use of their extremities, they do not need corrective braces or appliances, and they do not have asthma. The females were basically similar in their need for glasses, normal use of arms and hands, and lack of trouble from indigestion.

From other biographical data reported in the SIB, it was possible to learn something about the similarities among the seven samples. Although the samples differed in their interests in a number of hobbies and extra curricular activities, the males were not significantly different in their interests in photography and hunting and fishing. It should be noted, however, that for 11 of the 27 hobbies and activities, comparisons with TALENT data were not possible due to the restructuring of SIB items.

All students had similar reading interests (or really lack of interests) in opinion and science fiction magazines. Males were similarly attracted to news and pictorial magazines with about 40 per cent receiving two or more such magazines regularly. Females were similar in their lack of interest in adventure, business, and trade magazines and similar in their interest in magazines featuring love and etiquette. About 25 per cent of the females reported receiving at least one of each type of magazine regularly.

Youth in all samples did not move often during the three years prior to the study. The vast majority lived in the same houses or apartments for that period of time. More of the married females lived in more than one home, as would be expected since they responded after marriage, but even so their responses were not significantly different from all youth. Only eight per cent of the married females lived in more than two houses, whereas seven per cent of the females and nine per cent of the males in the TALENT sample moved more than twice in the three years prior to responding.

From the paragraphs above it can be observed that relatively few similarities exist among the samples. However, if a few percentage points provided statistical significance between two samples, the item was considered as indicating a difference. Also, the SIB does not include a representative sample of the characteristics of adolescents but does include items which were believed to be important in differentiating among the samples. It seems safe to generalize that the youth in the various samples are alike in far more ways than these data suggest.

Differences Among Sample Groups

In the following paragraphs, SIB items which differentiate the Project TALENT sample from the persisters and dropouts will be discussed. The trends to be discussed will be based on items that did not differentiate dropouts from persisters. Since the responses of dropouts and persisters were similar, these trends are assumed to characterize the combined samples of this study as they differ from the national adolescent population with IQs of 110 and above.

Perhaps of greatest significance are the data obtained from Part II of the SIB. These data are found in tabular form in the Appendix. The samples in this study did not differ on such important variables as occupation of the father, occupation of the mother, educational level of the father, and educational level of the mother. The males and unmarried females had the same expectations about how much money they would be making twenty years from now. Married females expected considerably less than did those in other samples. When compared with Project TALENT data these students reported more fathers working as laborers and as skilled laborers and fewer fathers working as professionals or owners or managers of businesses; more employed mothers, particularly as semi-skilled workers in factories; and lower educational attainment of parents.

Most of the statistical differences noted in Table 18 do not appear to be of much practical significance. In many instances, a significant chi square resulted from the overwhelming popularity of one choice by the youth in all samples. Differences of a few percentage points in the other categories did not seem big enough to warrent generalizations and as a result, items judged to be significantly different as a result of the statistical analysis but of little practical difference will not be discussed in the paragraphs that follow.

From the hobbies and activities section of the SIB it can be observed that the Project TALENT sample spent less time building things like cabinets and more time building models and gardening. The national sample of boys spent less time drawing, painting and decorating and less time acting and singing than the sample in this study. Girls in this study were members of social clubs and journalistic activities less frequently than girls from the national sample.

An unexpected finding was that the males in this study did not start earning money as soon as those in the national sample. Another unexpected finding involved changing schools. The male dropouts had a pattern that was very similar to the males in Project TALENT, but the male and female persisters were more stable than each of the other groups. The exception was the married female dropout group that did not change schools as often as the persisters. The percentages of youth that did not change schools since starting the first grade were as follows: married female dropouts 60, male persisters 55, female persisters 54, females from TALENT 42, males from TALENT 36, male dropouts 35, unmarried female dropouts 27.

Reading habits suggested a few surprises also. Both males and females from Project TALENT read less about politics and world affairs than the sample in this study. More expected were findings that the Project TALENT females read less science fiction and more religious material than the females in this study, and the males in Project TALENT read more plays and poetry and more farm, business, professional and trade magazines than male persisters and dropouts.

In school the persisters and dropouts feel that they have more difficulty with reading and expressing themselves in written reports and they consider difficult assignments more of a challenge than do those youth from the Project TALENT sample.

Youth from the Project TALENT sample have taken more work in science, social studies, and English and Project TALENT girls have taken more business (or commercial) and less mathematics courses than dropouts and persisters. However, the Project TALENT data were collected in the second semester of the twelfth grade and the persister and dropout data were collected from six months to a year and a half eariler depending upon time of withdrawal from school.

Grades received generally differentiate dropouts from persisters but both dropouts and persisters reported lower grades in vocational and business (or commercial) courses than did the students representative of the nation.

The SIB items referring to automobiles were very interesting and did not differentiate in the expected directions. Although more families of female dropouts and persisters owned cars than females from Project TALENT, the trend was reversed for males. When car owners were compared, it was apparent that about 10 per cent more of the families of female dropouts and persisters had cars five years old or older and in general had somewhat older cars. Among the males, a different trend emerged among car owners also. Families of male dropouts and persisters had a few more cars that were less than a year old and a few more cars that were five or more years old than the national sample. Obviously, parents of male dropouts and persisters owned fewer cars from one to five years old than did families of the Project TALENT sample.

The actual differences in reported physical condition, although statistically significant, are so small that there is little practical significance. If a difference is significant, it is in favor of the Project TALENT sample.

2

Attitude Inventory for Youth

From the Attitude Inventory data it was easy to observe that dropouts and persisters seldom disagree in the direction of their expressed feelings, but they do differ in the intensity or degree of their feelings about many things. The complete set of attitude scales used to supplement the interview data is in the Appendix. Specific data for each item will not be presented with this report, but items to which dropouts and persisters responded differently as indicated by a chi-square value significant at or lower than the .05 level will be discussed.

Attitudes Toward School and Teachers

From the Attitudes Concerning Schools and Teachers Scale, the response to the following items distinguished between male dropouts and persisters: 1, 7, 12, 13, 15, 18, 21, 23, 28, 31, 33, 35, 39, 40, 41, 42, 45, 48, 51, 58, 64, 66, 67, and 69.

Both dropouts and persisters believe that their parents feel school is very important and that their parents think they should place more value on school. However, the persisters, more than the dropouts, perceive their parents as placing more value on school. The dropouts, more than the persisters, believe their parents think youth should place more value on school. Since the dropouts have withdrawn from school these perceptions may be very accurate.

In expressing their own feelings about school and teachers, dropouts did not express views which could be considered opposite to those held by persisters. The closest they came to holding opposite views involved responses to items dealing with ease of and freedom in arranging good classes, contact between teachers and students, and effectiveness of teaching. Dropouts believed that they had considerably more difficulty enrolling in good courses, did not have enough contact with teachers, and that most teachers do not do enough real teaching. Their definitions of "good courses" and "real teaching" were not suitably explored for generalization.

For the remaining items which contributed to differentiating dropouts from persisters in the School and Teacher Scale, dropouts and persisters responded in the same direction to the statements. The statistical differences were generated from the degree to which they agreed or disagreed. Persisters expressed a strong liking for school and were well satisfied with their work. Dropouts agreed with these statements but not as strongly as did persisters. While neither group felt school was without value, or boring, or that courses were too easy, persisters registered these opinions more strongly than dropouts.

Persisters, more than dropouts, respected most of their teachers and felt their teachers were well prepared for teaching, knew their subject well, and understood problems of students. The majority of both dropouts and persisters disagreed with the statments which follow: "most teachers are cold," "school people hold students down too much," "school people use punishment too often," "teachers seldom listen to students," "teachers play favorites too often," and "teachers try to make it hard for you." However, persisters disagreed more strongly with the statements than did dropouts. Dropouts, more than persisters, felt that teachers should "take their time" and proceed more slowly and that school does not prepare students for the real world. While dropouts and persisters agreed that is it hard to find a job if one does not graduate from high school, the dropouts did not agree as strongly as did persisters. Although most dropouts were employed when they responded to the scale, it is likely that they believed they could get a job when they withdrew.

Unmarried female dropouts established a pattern of responses which was different from female persisters on the following items: 2, 8, 13, 15, 23, 26, 41, 45, 58, 60, 61, 62, and 64. Married female dropouts were differentiated on items numbered 3, 15, 22, 44, 45, 58, 62, and 63.

Dropouts of both sexes differed from persisters in their views of the value for them of school (items 15 and 58) and in the difficulty non-graduates have finding a job. Dropouts see less value in school and do not believe it is difficult for them to find work (item 45). The question about work referred to difficulty in finding employment, however, not effective utilization of their talent in their work.

Unmarried female dropouts were similar to male dropouts in their attitudinal expression in that they did not like school or respect teachers (items 13, 23, and 41) as much as did the persister samples.

Female persisters, more than unmarried female dropouts, believed that their parents think everyone should graduate from high school, that most of their teachers were good ones, that most courses provide something that is needed, and that there should be more ability grouping. In turn, persisters, more than unmarried dropouts, disagreed with such statements as "most teachers are cold," "most students aren't interested in school," "there are too many social activities," and "school is a bore."

Married dropouts thought their parents were not as satisfied with the school system, and they felt more strongly that people look down on those who do not graduate from high school than did the youth in other samples. Although they agreed that students need more counseling, they did not agree as strongly as did female persisters. Perhaps the respondents were thinking of students in general rather than themselves as they answered that item.

Both groups of female dropouts were more neutral in their response than persisters to the statement that "there are too many social activities for may age group." Perhaps this reflects some jealousy because of their less frequent participation in activities than persisters who disagreed rather strongly with the statement.

Before leaving the Attitude Toward School and Teaching section, it should be recognized that this discussion has concentrated on differences between dropouts and persisters rather than similarities found among the 69 items in this section. Differences were found on 24 items for males, 13 for unmarried females, and 8 for married females. Of the 69, only 34 were found to differentiate dropouts from persisters. In other words, half of the items judged to suggest differences between dropouts and persisters when the scale was formulated did not do so and that in attitudes, dropouts and persisters hold many in common.

Goals

Another section of the Attitude Inventory delt with goals. None of the goals for which significant chi squares were obtained between dropouts and persisters were judged very unimportant by either group. Mean responses for all goals were viewed by most youth to be very important, important or of questionable importance. The full five point scale which ranged from "very important" to "very unimportant" was seldom used. Male dropouts viewed "have a happy marriage" and "be an individual" as very important and "go to a technical school" and "live in a fine house" as important. Whereas male persisters ranked each of them significantly lower.

Unmarried female dropouts had a significant tendency to rate "earn a good income" as very important, but persisters rated it more often as important. Being respected by others and helping other people were ranked more highly by persisters than by the unmarried dropouts.

Married dropouts were similar to male dropouts in identifying a happy marriage as being more important to them than it was to persisters. College attendance was found to be less important (but still "important") to married dropouts and male dropouts than it was to persisters. In addition, married dropouts viewed "have a lot of wisdom" as more important than female persisters.

Self Concepts

As in the preceding section on attitudes toward school, the expressed attitudes of dropouts and persisters were more similar than many people believe. Differences were found with 11 of 34 goals and were not found for such goals as receive a good education, get a good job, be a good citizen, have a new car, own a business, develop new ideas, help myself, and many others.

Traits and Self Perception

In another section of the Attitude Inventory, the subjects were asked to rate a series of traits usually prefaced by "I am" on a scale from one (if it was like them most of the time) to five (if it was seldom like them). A list of traits was presented on the following page of the Attitude Inventory and each subject was asked to check the traits which characterized him as his parents thought he was and then check the traits which characterize him as his friends thought he was. These check sheets were followed by a scale for rating traits in other people. The ratings ranged from "admire very much" to "dislike very much." Attitudes toward these personal traits and characteristics will be discussed on the following pages. Significant differences were determined by the chi-square technique for the sections relating to self concept ("I am") and personal traits admired in others.

From a list of 49 statements in which subjects characterized themselves, male dropouts were significantly different from persisters on 13 items. Persisters rated themselves as more reliable and reverent and a better teamworker, but dropouts also rated themselves postively on these items. Dropouts, more so than persisters, rated themselves as having a short temper and as being clever, brave, stubborn, erratic, a gambler, and a hard worker. Surprisingly, male persisters rated themselves as less softhearted and more troubled by family problems than did dropouts.

Few differences among these statements were found for females. Although female persisters rated themselves as more unconventional than unmarried female dropouts, the married females registered the highest in this area. It is likely that their marriage accounts for most of this difference and it is unlikely that this variable would differentiate the married dropouts from the persisters prior to school withdrawal. The married female dropouts felt they had clever ideas more than did persisters. On the item "I am very bold", persisters and married dropouts said this was seldom like them. However, for unmarried females, the distribution of responses was rectangular with as many saying they were very bold as said they were very seldom bold.

The section of the Attitude Inventory on the subject's perception of how parents and friends view him is very interesting. Percentages of response for each trait for the five samples are found in the Appendix. Persisters checked more items than dropouts. Boys checked more items than girls. More items in the first column (i.e., in first half of list) were checked than in the second column.

For most of the 55 items, the youth perceived their parents, more often than did their friends, as using the given terms, phrases, or thoughts to characterize them. They (i.e. both dropouts and persisters) believed their friends used the following terms more than their parents when thinking of them: a funny person, confident, easy going, enthusiastic, happy-go-lucky, loyal, original, persistent, poised, and sincere. Sixty per cent of the subjects indicated that they think their friends characterize them as loyal, good natured, and easy going.

Both dropouts and persisters assumed their parents think of them as "capable of doing better." About 70 per cent checked "capable of doing better" as a view held by parents, and about 30 per cent checked it as a view of them held by friends. No other trait was checked as frequently as a view by parents. Other terms of phrases which youth believed their parents used more than their peers in thinking of them were: a good worker, about average, artistic, careless, demanding, enterprising, good, hard-headed, healthy, irritable, lazy, one who grew up too fast, mixed up, moody, stubborn, thankless, trying, and undependable. Of these characteristics, only the following were checked more than one third of the time as terms used by parents: a good worker, about average, capable of doing better, good, healthy, and stubborn. Those terms for which there is no difference between the perceived view of parents and friends, and which were checked more than one-third of the time include conscientious, attractive, humorous, and imaginative.

Turning now to differences between dropouts and persisters, it was observed that male persisters, more than male dropouts, believe that their parents think of them as a good worker (69% vs. 44%), capable of doing better (84% vs. 62%), confident (42% vs. 30%), conscientious (41% vs. 28%), contented (27% vs. 14%), easy going (56% vs. 46%), enterprising (37% vs. 16%), enthusiastic (46% vs. 32%), good (63% vs. 39), good natured (60% vs. 50%), healthy (86% vs. 57%), humerous (52% vs. 35%), loyal (62% vs. 34%), sincere (59% vs. 32%), and stable (41% vs. 20%). Male dropouts, more than male persisters, used the terms which follow when referring to parental views of them: careless (36% vs. 28%), gloomy (18% vs. 7%), hard headed (48% vs. 42%), one who grew up too fast (39% vs. 13%), original (34% vs. 24%), rowdy (21% vs. 9%), and thankless (16% vs. 3%). While most of the terms which were checked more often by dropouts than by persisters were infrequently checked and the differences between them were slight, it should be recognized that these are generally negative terms (such as gloomy and rowdy) and therefore less likely to be checked than neutral or positive terms.

From the data concerning perceived views of friends, persisters more than dropouts, checked these term: a good worker

(58% vs. 48%), a funny person (58% vs. 46%), enthusiastic (50% vs. 39%), good (55% vs. 34%), healthy (74% vs. 56%), loyal (77% vs. 54%), sincere (54% vs. 37%), and wise (40% vs. 28%). Although the list is similar to but shorter than the one for parents, two new terms were added "a funny person and wise."

The pattern of responses of female groups was rather different. The response were different both in the fact that the two female dropout groups checked some items more than males and that female dropouts checked items more often than persisters. For comparative purposes the differences will be presented and discussed in the same order for females as for males.

Female persisters, more than unmarried and married dropouts, believed that most of the time their parents think of them as good (59%, 42% and 41%), loyal (73%, 62%, and 50%), persistent (52%, 35%, and 41%), and stable (52%, 31%, and 39%). Female persisters, more than unmarried dropouts, believed their parents think of them as ingenious (35% vs. 23%). Female persisters, more than married dropouts, perceive their parents as thinking of them as good workers (69% vs. 56%), confident (48% vs. 26%), enthusiastic (47% vs. 26%), humerous (51% vs. 41%), imaginative (48% vs. 39%), original (42% vs. 26%), poised (40% vs. 28%), and sincere (64% vs. 54%).

Both groups of female dropouts believe their parents think they grew up too fast. Fifty-two per cent of the married dropouts and 39 per cent of the unmarried dropouts checked that item in contrast with 10 per cent of the persisters. Few of the people in four of the samples believed that their friends thought they grew up too fast. However, 21 per cent of the unmarried dropouts believed that friends thought they grew up too fast as contrasted with 11 per cent of the male dropouts, 10 per cent of the married female dropouts, and four per cent of the female persisters.

Married (but not unmarried) female dropouts, more than persisters, believe parents think they are about average (59% vs. 43%), mixed up (41% vs. 23%), self centered (19% vs. 5%), and sly (19% vs. 7%). Unmarried (but not married) female dropouts more than persisters, perceive parents as viewing them as careless (35% vs. 20%), easy going (62% vs. 40%), good natured (69% vs. 53%), happy go lucky (35% vs. 20%), imaginative (65% vs. 48%), and original (54% vs. 42%).

Married and unmarried dropouts differed in their perception of their parents' views. While more married than unmarried dropouts saw parents as viewing them as about average (59% vs. 46%), one who grew up too fast (52% vs. 39%), mixed up (41% vs. 15%), and quiet (35% vs. 23%); more unmarried than married dropouts thought their parents think of them as a funny person (39% vs. 22%), careless (37% vs. 17%), confident (54% vs. 26%), conscientious (58% vs. 23%), easy going (62% vs. 39%), enthusiastic (46% vs. 26%), good natured (69% vs. 48%), humorous (58% vs. 41%), imaginative (65% vs. 39%), moody (31% vs. 19%), original (54% vs. 26%), and poised (42% vs. 28%).

As with boys, the girls believed their friends held a number of views that are different from the views held by their parents and the views held by persisters are somewhat different from the views held by dropouts. The two samples of dropouts view friends as perceiving them in a similar way much of the time but in different ways also. More than married and unmarried dropouts, persisters believed their friends view them as good workers (69% vs. 48% and 42%), good (53% vs. 32% and 31%), healthy (61% vs. 39% and 39%), loyal (86% vs. 69% and 69%), persistent (43% vs. 30% and 27%), and stable (48% vs. 32% and 35%).

Persisters did not differ from unmarried female dropouts in their perception of what friends thought about them but both groups held some beliefs that were different from married dropouts in that regard. Persisters and unmarried dropouts, more often than married dropouts, checked confident (46% and 50% vs. 37%), enthusiastic (51% and 46% vs. 33%), humorous (57% and 54% vs. 41%), imaginative (51% and 50% vs. 33%), and wise (32% and 39% vs. 20%). Unmarried and married female dropouts differed on still other variables. More unmarried dropouts believed their friends thought they were capable of doing better (39% vs. 20%),happy-go-lucky (42% vs. 30%), one who grew up too fast (31% vs. 9%), mixed up (27% vs 13%), original (54% vs. 26%), poised (50% vs. 33%), and a social climber (27% vs. 7%). Unmarried dropouts more often than female persisters checked capable of doing better (39% vs. 15%), happy-go-lucky (42% vs. 31%), hard to get along with (15% vs. 1%), one who grew up too fast (31% vs. 4%), mixed up (27% vs. 15%), poised (50% vs. 37%), sarcastic (23% vs. 10%), and a social climber (27% vs. 14%). As can be observed only "hard to get along with" and "sarcastic," two infrequently checked items, were on the latter list but not on the former.

Married dropouts, more than unmarried dropouts and persisters, believed their friends thought of them as about average (54% vs. 39% and 40%) and unambitious (37% vs. 12% and 0%). Both samples of female dropouts, more than persisters, believed their friends thought of them as attractive (46% and 46% vs. 31%) and hard headed (15% and 19% vs. 3%).

Admired Personal Characteristics

The subjects were asked to indicate on a five point scale the strength of their admiration or dislike of people possessing each of 48 traits. Eight personal traits were found to differentiate male dropouts from persisters. Five were found which differentiated unmarried dropouts from female persisters and two separated married dropouts from persisters. One trait, "finish their education," was admired more by both female and male persisters than male and unmarried female dropouts. "Can do as they want" was admired more by both female dropout samples than by persisters. In addition to doing as they want, married dropouts were more impressed by "are happily married" than were persisters. Female persisters believed "are unselfish" and "have initiative" as well as "finish their education" to be more desirable traits than unmarried dropouts. Unmarried dropouts had a neutral feeling toward those who "do not have to follow orders," whereas persisters had a tendency to dislike such people.

Male persisters, more than male dropouts, admired those who "can reach their goals, " "are intelligent," "are extremely ambitious," "value their country," "finish their education," and "have religion." Male dropouts were neutral and slightly admiring of those who "are free to do as they choose" whereas male persisters were slightly on the other side of neutral in their opinion of such people.

Differences were noted for only 13 of 48 items. Dropouts and persisters of both sexes were similar in their admiration for persons who, to name a few items "have self confidence," "can get along with people," "think before they act," "are honest," "value their parents," "stick to the job," "are responsible," "make good without college," and "have a car of their own."

The Attitude Toward Planning Scale was one of the least differentiating of the subscales. Not one of the 16 items differentiated male or married dropouts from the male and female persisters. On only two items were unmarried dropouts different in their responses from female persisters. Female persisters said they did not "just take whatever comes along" to a greater extent than unmarried dropouts but they agreed more than did dropouts with the statement "planning for the future is more difficult than it was 25 years ago."

High School Personality Questionnaire

Table 20 has been prepared to provide an outline of characteristics associated with each of the HSPQ factors. The low score and high score descriptions represent the ends of a continuum with a score approximately midway between the extremes representing the "normal" or "typical."

Males

Factors E and F are dispositional traits (see Figure 1). Factor E is a measure of the Submissiveness-Dominance dimension. The dropouts boys were found to be significantly more assertive, independent, unconventional, and rebellious than the persisters ($p < .05$). Cattell & Beloff (1962) have pointed out that high dominance scores have been found to be associated with leadership striving, although "the correlation is higher with attempted leadership than accepted leadership." "Adventuresomeness" might best describe this dimension.

Factor F, the Desurgency-Surgency dimension, is considered to be one of the most important components of extraversion (Cattell & Beloff, 1962). The male dropouts again scored significantly higher than male persisters ($p < .01$). They could be described as having a more uninhibited and happy-go-lucky attitude than that of the persisters. Such an attitude is usually accompanied by less exacting aspirations. Cattell (1966) has suggested that this dimension is associated with home rearing practices. Individuals having a high F tend to come from homes characterized by permissiveness and nonchalance. It follows, then, that High F individuals would be expected to have had relatively few serious restrictions placed upon them in early life.

Table 20

HSPQ Factor Score Descriptions

Factors	Low Score Description	High Score Description
A	RESERVED, DETACHED, CRITICAL, COOL (Schizothymia)	OUTGOING, WARMHEARTED, EASY-GOING, PARTICIPATING (Cyclothymia)
B	LESS INTELLIGENT, CONCRETE-THINKING (Lower scholastic mental capacity)	MORE INTELLIGENT, ABSTRACT-THINKING, BRIGHT (Higher scholastic mental capacity)
C	AFFECTED BY FEELINGS, EMOTIONALLY LESS STABLE, EASILY UPSET, CHANGEABLE (Lower ego strength)	EMOTIONALLY STABLE, FACES REALITY, CALM (Higher ego strength)
D	PHLEGMATIC, DELIBERATE, INACTIVE, STODGY (Phlegmatic temperament)	EXCITABLE, IMPATIENT, DEMANDING, OVERACTIVE (Excitability)
E	OBEDIENT, MILD,CONFORMING (Submissiveness)	ASSERTIVE, INDEPENDENT, AGGRESSIVE, STUBBORN (Dominance)
F	SOBER, PRUDENT, SERIOUS, TACITURN (Desurgency)	HAPPY-GO-LUCKY, HEEDLESS, GAY, ENTHUSIASTIC (Surgency)
G	DISREGARDS RULES, UNDEPENDABLE, BY-PASSES OBLIGATIONS (Weaker superego strength)	CONSCIENTIOUS, PERSEVERING, STAID, RULE-BOUND (Stronger superego strength)
H	SHY, RESTRAINED, DIFFIDENT, TIMID (Threctia)	VENTURESOME, SOCIALLY BOLD, UNINHIBITED, SPONTANEOUS (Parmia)
I	TOUGH-MINDED, SELF-RELIANT, REALISTIC, NO-NONSENSE (Harria)	TENDER-MINDED,DEPENDENT, OVERPROTECTED, SENSITIVE (Premsia)

Table 20 (con't)

Factors	Low Score Description	High Score Description
J	VIGOROUS, GOES READILY WITH GROUP, ZESTFUL, GIVEN TO ACTION (Zeppia)	DOUBTING, OBSTRUCTIVE, INDIVIDUALISTIC, REFLECTIVE, INTERNALLY RESTRAINED, UNWILLING TO ACT (Coasthenia)
N	FORTHRIGHT, NATURAL, ARTLESS, SENTIMENTAL (Artlessness)	SHREWD, CALCULATING, WORLDLY, PENETRATING (Shrewdness)
O	SELF-ASSURED, PLACID, SECURE, SERENE (Untroubled adequacy)	APPREHENSIVE, WORRYING, DEPRESSIVE, TROUBLED (Guilt proneness)
Q_3	CASUAL, CARELESS OF SOCIAL RULES, UNTIDY, FOLLOWS OWN URGES (Low integration)	CONTROLLED, SOCIALLY-PRECISE, SELF-DISCIPLINED, COMPULSIVE (High self-concept control)
Q_4	RELAXED, TRANQUIL, TORPID, UNFRUSTRATED (Low ergic tension)	TENSE, DRIVEN, OVERWROUGHT, FRETFUL (High ergic tension)

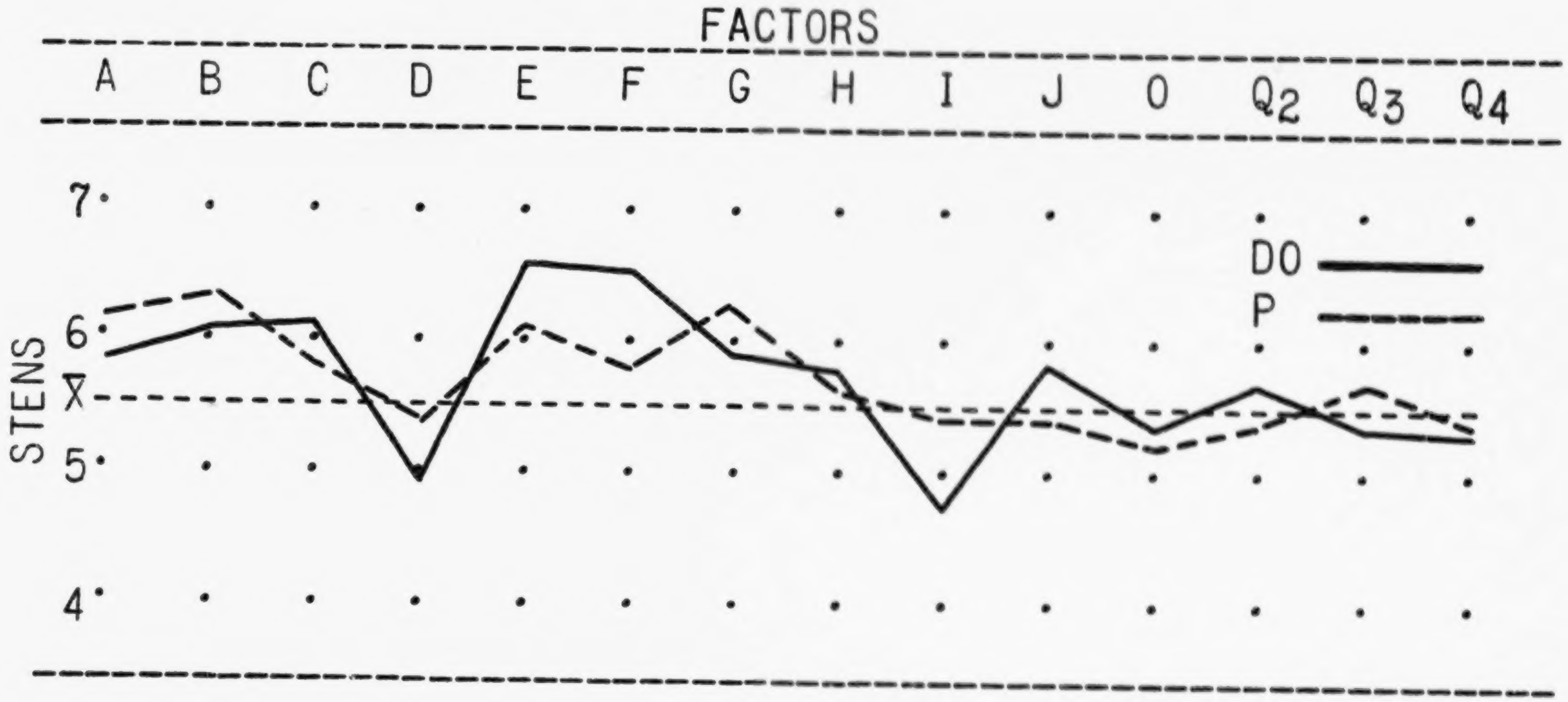

Figure 1. Mean HSPQ profiles of 125 male high school dropouts and 125 matched male high school persisters.

A third significant difference was found for Factor I (Realistic-Sensitive). This is the "tender vs. tough" or "soft headed vs. hard headed" dimension, especially as it relates to social attitudes. Individuals scoring low on Factor I would also be expected to have little aesthetic or dramatic inclination. The dropout boys were found to be more realistic, more prone to act on practical logical evidence, and more self reliant ($\underline{p} < .01$). As in the case of Factor F, Factor I is also considered to be associated with environmental determinants. Low I tends to reflect a home not protective nor concerned with the child.

Although no other significant differences were found between the two male groups, the data obtained on several of the remaining factors are relevant to understanding the personality of dropouts and persisters of high ability.

The means for both groups of boys were above the mean of the norm group on Factors A, B, and C. Factor A represents the aloof-sociable dimension. The dropouts and persisters tend to be good natured, easy-going, interested in other people, and cooperative.

The primary pupose of Factor B is to provide a quick measure of general ability. The performance of both groups was in basic agreement with findings on the longer and more reliable measures of intelligence used for original selection purposes.

Factor C is the immature-mature dimension. High scores here are associated with emotional maturity, stability, adjustment to facts and placidity. Although the scores of both groups fall above the mean, they are within normal or average limits.

Averaged scores for both dropouts and persisters were below the normative mean on Factor D, suggesting that the boys in this sample tend to be constant, self sufficient, and deliberate. Referring to the mean score of the dropout group on this dimension, Cattell (1966) suggested that "If anything...they would be a bit oversecure."

Unmarried Females

Differences between unmarried dropouts and persisters which were significant were found along two dimensions (see Figure 2).

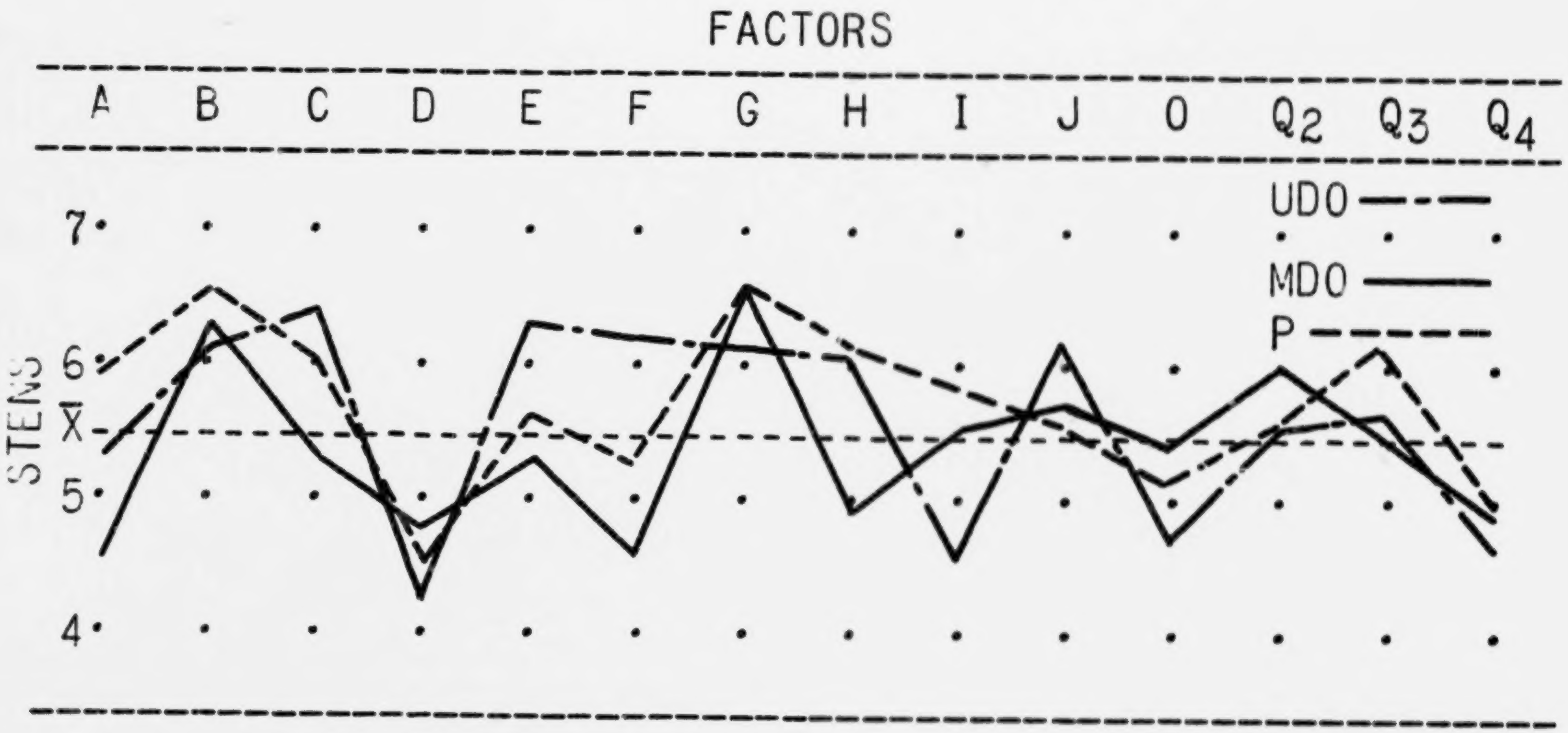

Figure 2. Mean HSPQ profiles of 26 unmarried and 55 married female high school dropouts and 81 matched female high school persisters.

The dropouts are more frank, happy-go-lucky, and talkative ($\underline{p} < .05$), as indicated by a high score on Factor F. And a low score on Factor I suggests that they are more self-reliant, practical, and responsible ($\underline{p} < .05$).

Of particular interest is the marked similarity between the unmarried female dropouts and the male dropouts (see Figure 3). They do not deviate statistically from each other on any of the 14 factors. The description of the male dropouts would basically apply to the unmarried females.

Married Females

The girls withdrawing from school because of marriage (see Figure 2) differ significantly from the female persisters only on Factors A ($\underline{p} < .001$) and Factor H ($\underline{p} < .001$). The married girls were far less socially oriented than were the persisters; they were less prone to seek social recognition. Also, they were more inclined to work alone, preferring things or words to people. Low A is generally associated therefore, with poor social adjustment in junior and senior high school.

The married girls scored much lower on Factor H than the persisters. They were more restrained and withdrawn, tending to be careful and "well behaved." These girls would be expected to be less prone than the persisters to seek out new and unknown social situations and could be described as tending to be shy and retiring.

Both the married girls and the persisters scored high on Factor G, suggesting drive and persistence. High scores along this dimension suggest regard for moral standards and emotional maturity, both of which are associated with achievement and occupational success in later life.

Significant differences were found on Factor C ($\underline{p} < .05$), Factor E ($\underline{p} < .05$), Factor F ($\underline{p} < .001$), and Factor H ($\underline{p} < .05$) when married and unmarried female dropouts were compared. The unmarried females provided responses indicating they were more mature, realistic, assertive, and self assured. Behaviorally, they can be expected to be more talkative, impulsive and frivolous. Social contact brings them more gratification than it does the married dropouts.

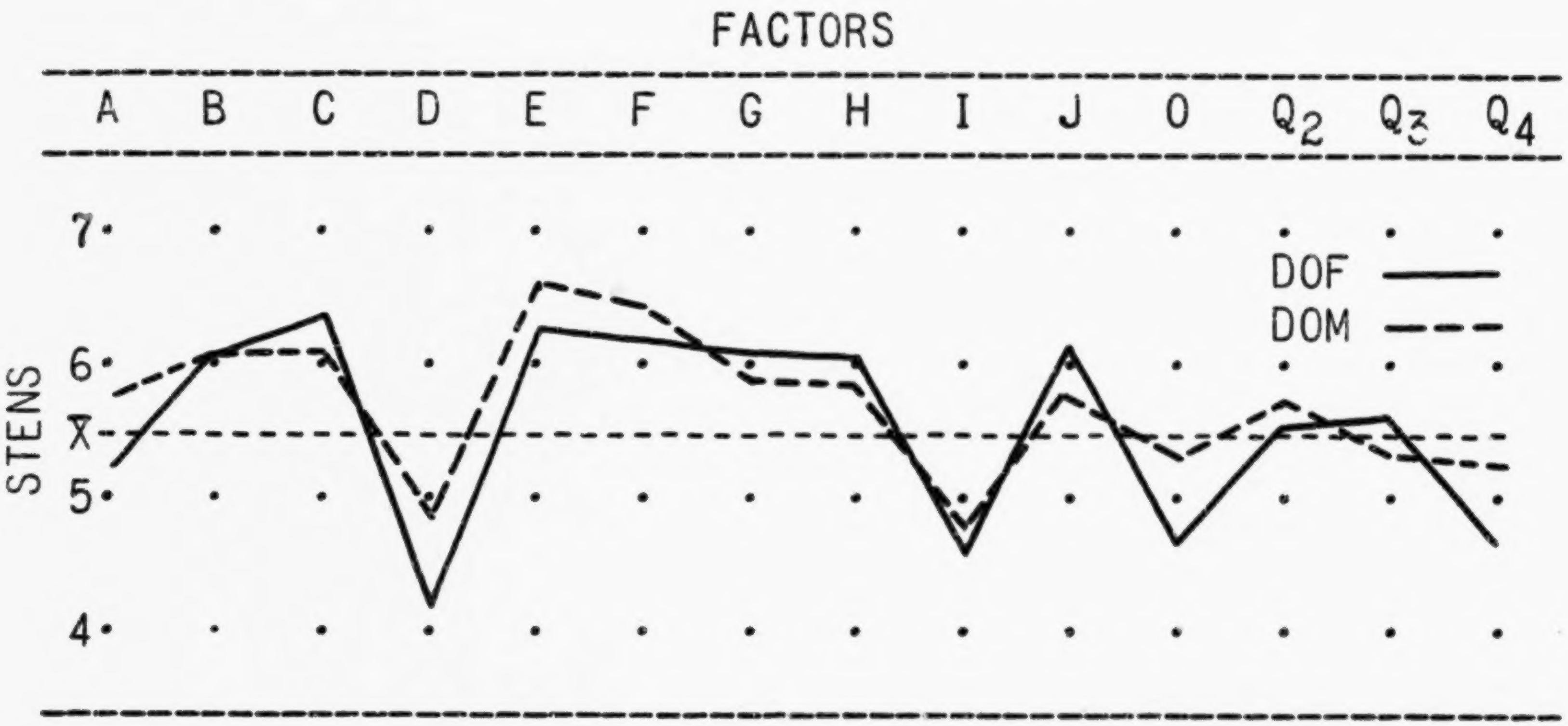

Figure 3. Mean HSPQ profiles of 125 male high school dropouts and 26 unmarried female high school dropouts.

The married dropouts differ from the male dropouts in that they are somewhat more emotionally mature($p < .05$), less impulsive ($p < .05$), less aggressive ($p < .05$), less dependent upon social approval ($p < .05$), and are far less extroverted and expressive ($p < .01$). It should be recalled that most of the females were married when the test was used.

Minnesota Vocational Interest Inventory

Male Dropouts

When the scores for the MVII Occupational Scales were plotted in profile form for male dropouts, the patterns for male dropouts were very typical of men in general. Each of the Occupational Scale score means, except one, was within the range of scores of the middle third of a group of skilled tradesmen used as the MVII norm group. The one scale on which the dropouts recorded a higher mean score than did working men was that of Tab Machine Operator, and it was not high enough to be considered significant.

Generally, mean Occupational Scale scores for male persisters fall in the average range, but a few exceptions were noted. Male persister scores which were higher than those of skilled tradesmen were recorded on the scales labeled Baker, Milk Truck Driver, Retail Sales Clerk, Stock Clerk, Tab Machine Operator, Hospital Attendant and Radio-TV Serviceman. A lower score was obtained on the Truck Mechanic Scale.

Campbell (1965) states that differences of five or more standard scores (i.e., one half standard deviation) indicate significant differences between groups. Differences of five or more standard scores were found with persisters higher on the Milk Wagon Driver (+5) Scale and dropouts higher on the Truck Mechanic (+10) and Sheet Metal Worker (+5) Scales. The Occupational Scale score means for male dropouts and persisters can be found in Table 21 and the mean Area (or homogeneous) Scale standard scores can be found in 22. As can be seen in Table 22, male persisters were significantly higher than the dropouts in the Health Service (+7) and Sales Office (+7) areas and significantly lower in the Mechanical Area (-5). However, until further verification of these patterns is obtained, the differences noted in Occupational and Area Scale means will be

Table 21

Mean Occupational Scale Standard Scores
for Dropouts and Persisters
(MVII)

Occupational Scales	MP	MD	FP	FDU	FDM
1. Baker	44	40	57	56	58
2. Food Ser. Manager	39	36	50	46	50
3. Milk Wagon Driver	42	37	51	50	53
4. Retail Sales Clerk	41	37	56	57	57
5. Stock Clerk	50	47	62	62	64
6. Printer	38	35	52	53	50
7. Tab. Machine Oper.	39	36	47	48	46
8. Warehouseman	41	41	43	46	49
9. Hospital Attendant	41	37	47	43	47
10. Pressman	29	28	28	28	23
11. Carpenter	35	36	27	29	25
12. Painter	31	31	36	36	38
13. Plasterer	31	29	30	30	31
14. Truck Driver	30	34	12	18	15
15. Truck Mechanic	25	35	3	6	4
16. Indus. Ed. Teacher	20	22	4	2	-2
17. Sheet Metal Worker	31	36	20	19	17
18. Plumber	27	31	7	7	8
19. Machinist	31	33	25	23	21
20. Electrician	22	26	6	4	2
21. Radio-TV Repairman	34	33	29	26	26

N=125 for male persisters, 125 for male dropouts, 81 for female persisters, 26 for female dropouts unmarried and 55 for female dropouts married.

Table 22

Mean Area Scale Standard Scores for Dropouts and Persisters (MVII)

Area Scales	MP	MD	FP	FDU	FDM
1. Mechanical	39	46	25	26	25
2. Health Service	59	52	64	60	64
3. Office Work	54	54	68	71	74
4. Electronics	46	50	33	34	33
5. Food Service	53	51	66	62	67
6. Carpentry	43	45	40	44	42
7. Sales Office	60	55	69	67	61
8. "Clean Hands"	54	53	59	61	56
9. Outdoors	46	48	31	31	31

considered as of moderate significance in characterizing the groups.

MVII Dropout Key. Since profile differences of considerable magnitude in Occupational and Area scores were not observed, a new empirical key was developed by John Bonfield (see Appendix E) to describe interests of dropouts. The key was developed according to the procedures used in the development of other MVII keys. Those items on which the 125 dropouts differed from the 125 persisters by a 20 per cent margin or more were selected for inclusion on the MVII Dropout Key. A list of 57 items was obtained from this procedure and a unit weight of "plus one" was assigned to those responses made more frequently by dropouts and a "minus one" was assigned to those response made more frequently by the persisters (Appendix F). Scores above zero for males with IQs of 110 or above on the dropout scale indicate vocational interests similar to dropouts and scores below zero suggest vocational interests similar to those students remaining in school.

A complete cross-validation of the key has not as yet been obtained, but must be obtained before it is used. As a part of another study, a partial cross-validation of the key was conducted Bonfield using 20 male dropouts and 20 male persisters with IQs of 130 and above. (Bonfield used a key based on the differences at the 17 per cent level which was about twice as long as the one in the Appendix.) Two of the 20 dropouts earned scores of - 3 which indicated interests similar to persisters. Follow-up data revealed that the dropouts had, in fact, finished secondary school requirements. One finished high school while in Naval service and the other was attending college as a part time student. Five of the persisters had interests similar to dropouts but stayed in school through the year in which the data were collected. The data from this small sample of very high ability males are very promising, but additional validation of the key will be necessary before the key is usable for perdiction. With students of average intellectual ability the findings may not be as clear cut as those of Bonfield's study.

High and low MVII scores. According to the author of the MVII, seven out of 10 men working in a given occupation score above 45 on their own scale. Scores above 45 are believed to indicate that one earning such a score has interests in common with men in that occupation, and the person with a score of 45 or more would probably enjoy that work or work of a closely related job. Persons with standard scores below 25 definitely do not have the same interests as men in that job, and they probably would not enjoy the work. The number of male dropouts and persisters with low and high scores for each Occupational and Area Scale can be found in Table 23.

In Table 23, some differences in numbers of dropouts and persisters with significantly high and low scores can be observed. The largest difference is observed on the Truck Mechanic Scale with 62 dropouts and persisters recording scores of 45 or higher and 94 rejecting interests of truck mechanics. Thirty-four more dropouts than persisters recorded high scores on the Truck Mechanic Scale and 20 more persisters than dropouts rejected interests similar to truck mechanics. The dropouts expressed greater interest in mechanical activities, such as machine operation and design, home repairs of mechanical and electronical gadgets, etc. The persisters, on the other hand, demonstrated greater interest in medical related activities, such as working in medical or chemical laboratories. Persisters also expressed greater interest in Sales-Office activities. Campbell (1966) has suggested that this scale might better be referred to as "Cultural-Aesthetic," for the items which form it deal with activities related to speaking and writing, art, music, and other socially accepted "highly thought of" activities.

High levels of interest for both dropouts and persisters were noted on the Stock Clerk,Baker, Retail Sales Clerk, Milk Wagon Driver, Warehouseman, Tab Machine Operator, and Hospital Attendant Scales. Low interests were indicated on several scales, including those of Industrial Education Teacher, Electrician, Truck Mechanic, Pressman, Plasterer, Plumber, Painter, and Machinist. It should be noted that skilled tradesmen in general have interests similar to those of stock clerks and dissimilar to those of industrial education teachers, electricians, pressmen, and radio-TV repairmen. Differences can be noted among the popularly chosen interest fields in numbers of dropouts and persisters were significantly high and low scores on the Baker, Hospital Attendant, and Retail Sales Clerk Scales. Among the less popular scales, Electrician and Milk Wagon Driver Scales, as well as the Truck Mechanic Scale, differentiated persisters from dropouts. As can be seen in Table 23, more persisters than dropouts have interests similar to bakers, hospital attendants and retail sales clerks, and more persisters than dropouts reject the interests of electricians. More dropouts than persisters reject the inter-

Table 23

Number of Low and High MVII
Scaled Scores Recorded by
Male Dropouts and Persisters

Occupational Scales	25 and below		45-55		56 and above		45 and above	
	DO	P	DO	P	DO	P	DO	P
1.	1	1	27	42	10	25	37	67
2.	0	0	15	28	4	3	19	31
3.	27	7	26	32	10	9	36	41
4.	25	6	30	33	3	14	33	47
5.	0	0	41	43	28	37	69	80
6.	24	13	20	25	2	9	22	34
7.	30	13	18	38	9	6	27	44
8.	3	3	23	32	10	11	33	43
9.	5	0	20	36	5	10	25	46
10.	47	47	9	10	0	2	9	12
11.	29	27	18	21	7	6	25	27
12.	40	42	13	11	1	2	14	13
13.	45	46	7	12	2	0	9	12
14.	29	46	18	12	4	0	22	12
15.	37	57	38	12	10	2	48	14
16.	67	69	5	5	0	0	5	5
17.	28	34	26	18	6	0	32	18
18.	36	52	11	11	1	0	12	11
19.	29	40	13	11	0	0	13	11
20.	55	76	12	15	0	1	12	15
21.	32	27	10	13	3	8	13	21

Table 24

Number of Low and High MVII Area Scaled Scores Recorded by Male Dropouts and Persisters

	Below 30		Above 70	
Area Scales	DO	P	DO	P
1. Mechanical	20	33	0	0
2. Health Service	0	0	7	26
3. Office Work	0	0	16	14
4. Electronics	8	10	6	7
5. Food Service	0	0	10	9
6. Carpentry	10	11	2	1
7. Sales-Office	0	0	12	24
8. "Clean Hands"	0	0	13	13
9. Outdoors	9	10	0	0

ests of milk wagon drivers. Among the Area scores for males, the tally of scores below 30 and over 70 for dropouts and persisters (as found in Table 24) supports the analysis of means reported earlier.

Female Dropouts

Seldom has the MVII been used with women and the profile provided by the authors is intended primarily for use with men. As can be observed in Tables 25 and 26, the standard scores for females were generally high on the Area (or homogeneous) Scales relating to Office Work, Sales-Office, Food Service, and Health Services and generally low in the Mechanical, Outdoors, and Electronics Scales.

Few differences between groups of females were apparent. Although the Sales-Office or "Cultural Aesthetic" interests were high among all girls in this study, they were less so among married female dropouts (-6 and -8) than among the other female samples. While all three groups of girls earned relatively high scores in the Health Service Area, unmarried female dropouts recorded fewer very high scores than married dropouts and persisters (+4 and see Table 26). Both groups of dropouts recorded more very high scores on the homogeneous Office Work Scale, as indicated in Table 26, but the married dropouts had significantly higher mean (+6) than the persisters. However, the profiles for the girls were strikingly similar on both the Area and Occupational Scales. All three groups of females revealed a pattern of interest similar to those of stock clerks, bakers, retail sales clerks, printers, milk wagon (or light truck) drivers, and food service managers and unlike industrial education teachers, electricians, truck mechanics, plumbers, (heavy) truck drivers, and sheet metal workers.

Inconsistent Interest Patterns

A "Flat Profile" (i.e., no scores particularly high and none particularly low) is associated with inconsistent expression of preference because one's interests lie in fields not measured by the instrument, because one's interests have not matured to a point of concentration in one area or another, or because one has taken the inventory without any particular at-

Table 25

Percentages of Low and High MVII Scaled Scores Recorded by Female Dropouts and Persisters

Occupational Scales	25 and below			56 and above			45 and above		
	FP	FDU	FDM	FP	FDU	FDM	FP	FDU	FDM
1.	0	0	0	73	71	58	96	89	88
2.	0	0	0	12	56	1	80	89	50
3.	1	0	0	25	33	2	89	89	81
4.	0	0	0	63	64	26	95	98	100
5.	0	0	0	79	91	77	98	98	88
6.	0	0	0	44	25	46	88	84	85
7.	0	0	0	10	9	12	65	56	38
8.	5	0	1	12	25	1	48	75	58
9.	0	0	0	21	11	1	60	75	50
10.	42	65	42	0	0	0	5	0	1
11.	44	65	38	0	0	0	2	4	12
12.	16	9	23	0	2	0	19	22	2
13.	33	30	81	0	0	0	5	5	1
14.	99	91	85	0	0	0	0	0	0
15.	96	65	96	0	0	0	0	0	0
16.	93	98	96	0	0	0	0	0	0
17.	77	85	81	0	0	0	1	0	0
18.	95	96	100	0	0	0	0	0	0
19.	62	78	65	0	0	0	0	0	0
20.	95	84	100	0	0	0	0	0	0
21.	28	26	50	0	0	0	2	0	0

FP=female persisters, FDU=female dropouts unmarried, FDM=female dropouts married

Table 26

Percentages of Low and High MVII Area
Scaled Scores Recorded by
Female Dropouts and Persisters

Area Scales	30 and below			70 and above		
	FP	FDU	FDM	FP	FDU	FDM
1. Mechanical	94	88	93	0	0	0
2. Health Service	0	0	0	33	19	35
3. Office Work	0	0	0	39	50	56
4. Electronics	41	38	51	0	0	0
5. Food Service	0	0	0	28	30	35
6. Carpentry	4	8	7	0	0	0
7. Sales-Office	0	0	0	35	42	16
8. "Clean Hands"	0	0	0	17	27	18
9. Outdoors	50	54	58	0	0	0

tention to the content of the individual item. Neither dropouts nor persisters presented an unusual number of flat profiles. Both male samples averaged scores nearly five Occupational Scale standard scores above 45 and male dropouts averaged 4.1 scales below 25 while persisters recorded an average of 4.8 reject scales. Females averaged 7.9 high scales and 7.5 low scales with little difference between groups. The large number of significant scales for females is believed to be due to characteristics of the scale rather than of the samples.

Although it is very possible that a number of dropouts and persisters have interests similar to people engaged in work in addition to those occupations and areas identified by the MVII, the MVII was appropriate for use in this study. Other interest assessment techniques may suggest additional and very important interests for some subjects.

Interest in Vocational Training

Several questions on the Work History Blank pertained to education completed since high school and one specifically asked about training that might be desired. Only 11 of the 102 male dropouts said they did not want any more training. Thirty did not respond. More than half of the non-respondents were employed as mechanics, carpenters, or electronics workers, or by the armed forces, and many implied in answering other questions that they had received or they were receiving on the job training. The remaining non-respondents to that question either entered a question mark or in response to other items indicated that they were undecided. Of the specialities mentioned, training as a mechanic was most desired with 12 requests and was followed by electronics or electrician with eight, and welder and accountant or office worker with five. Nine wanted to complete high school and six wanted to go to college. Two wanted training as policemen and others mentioned once included farmer, forester, game warden, gunsmith, printer, equipment operator, and plumber. Some of these jobs show up on the MVII, but others do not.

The responses of the two groups of female dropouts for desire for training have been combined. Only six females (of 75) said they did not want additional training and 10 others did not answer the item. Most of the 16 were busily engaged in child rearing. Fourteen hoped to complete high school and two planned to enroll in college next year. Twenty were seeking training in secretarial and business activities, 11 wanted training as a beautician or hair stylist, five mentioned some form of medical technology, and five referred to training as artists. Some girls mentioned training as a beautician because such training did not require high school graduation. The remaining choices for training were mentioned only once and included such work as night club entertainer, psychiatrist, and teacher.

The girl who wanted to be a "forensic psychiatrist" was asked to leave school because she was ill. The potential night club entertainer was one who anticipated a very high income in a few years. The hopeful teacher was a playground director when contacted. The boy who wanted to be a game warden was asked to leave school and is now employed as a stock boy. When the latter boy was asked when he will reach his vocational goal he replied "never." Although the responses of some subjects to vocational goal and training items were semmingly immature, such as "gas complaint man" and "I haven't decided yet", and others were very unrealistic, such as the boy who wants to be "C.P.A." but had no plans for additional education, most responses seemed to have received careful thought and seemed to be practical.

Interview

As part of the attitude scales which were devised to overcome deficiencies of interviews, several open end questions were asked which required written responses. The wording of the questions permitted a wide range of responses. Analysis of the written answers is, therefore, not amenable to statistical techniques as are responses to more formalized tests. A simple frequency measure was employed. It must be kept in mind that although the inclusion of certain topic material can be considered as representing that which concerns the respondent, the exclusion of topic material does not necessarily indicate that there is lack of concern.

Reasons for Withdrawal

Male dropouts. How did the male dropouts feel about leaving school without having graduated? Of those responding, 31 expressed little concern or regret. As John put it,

> I don't even think of it. I have a good job and enjoy life more than some of my friends who did graduate. A diploma is a good think to have I grant you, but I have had everything and earned it myself without one. Someday I shall get one just to ease my mind a bit and to please both parents.

On the other hand, 36 expressed some degree of regret. Ronald, who left because of failing grades, put it this way,

> I feel as though I have failed in more ways than one. I have failed myself, my teachers, may parents, everyone.

The remaining 33 fell somewhere between the other two groups. They appeared neither to be overly sorry nor satisified with their status as dropouts.

It would be difficult, if not impossible, to determine from the written interviews the "real" reasons which led to withdrawal. However, the expressions of discontent with the school setting fell logically into four areas.

First of all, the dropouts felt that the schools weren't preparing students for the real world. Interestingly, two major groups expressed themselves to this topic. One group (21) suggested that schools didn't provide sufficient academic specialization (science, mathematics, etc.). The other group (36) contended that there is a serious need for more specialized training in vocational areas. For these two groups the problem was either that the content of the courses offered was considerably too basic or that there wasn't sufficient variety of courses offered.

Second, and related to the first reason for not being content with school, is the level of student involvement in the planning of curriculum. Some of the male dropouts (12) formally listed this reason and others implied it) felt that they had too little to say in the selection of the courses and that too many courses were required. They often felt that course selection was in conflict with their own desires and best interests.

A third reason for their discontent with school relates directly to teachers. There seems to have been an emotional gap between the dropout boys and their teachers. Thirteen of the boys mentioned that they would have benefited from teachers who cared for the students. As an example, one dropout put it this way.

> If the teachers would take a little more time and interest, and show the students that someone cares about them and how they are getting along, the students would try a lot harder and get better grades. Some people just don't have the ability but many more have it and don't use it. What's the use of trying if no one notices or cares about your efforts? I know I never would have left school if my teachers and principal had listened to me and tried to understand why I found a subject so difficult. If they had helped me instead of lecturing, I would be a graduate today. I only had four weeks to go.

Others pointed to favoritism as a problem concerning them. (Seven mentioned this point directly and nine inferred it.) Gary put it in the following terms,

> In our school the teachers were very friendly with the student who belonged to the football or basketball team or who were on the honor roll. They didn't bother with the student who was too shy to openly discuss matters in class or who weren't popular in all of the activities.

A fourth reason, mentioned by 22 of the boys, relates to an incompatibility of the dropout with the "system" or educational approach of the school. Several of the dropouts were able to verbalize this in very descriptive terms. The situation, as seen by Charles, is as follows,

> The present high school system is set up to accomodate the majority of the students. When your personality traits do not agree with this system, the best thing to do is leave and get your education your own way. This is what I am doing and the only thing I am sorry for is that I did not fit.

John, a boy with an IQ of 120, commented,

> Schools are run too much on a formal or military basis....I could never relax in school and really talk with any teacher because of this tense uneasy feeling.

A variation of this theme occuring time and time again relates to conflict with the ultimate goals of the school. As William expressed it,

> My personal opinion is that schools are being run more like factories with the end product a person designed like the school thinks he should be. If a student doesn't match up to what the school wants, he is not given half the chance of a student who is making the grades and is conforming.

Few of the male dropouts were openly critical of teachers and other school personnel as individuals. They were, however, generally frank in stating that the quality of instruction leaves much to be desired, that there is a serious lack of the kind of vocational training best suited to meet their felt needs and interests, and that the communication between students and their teachers and counselors needs improvement. They often expressed the notion that they should have had a more active role in determining the course work in which they were to be involved. And many expressed the concern that students are being pushed through school at a pace too rapid for their own good.

Female dropouts. The attitudes of the girls who withdrew from school for reasons other than marriage were similar to those of the boys. They also expressed the notion that school training didn't meet their needs as related to their vocational or professional goals. Although these girls also appeared to be estranged from their teachers there was little reference made to unfair treatment or favoritism.

The girls who left school for marriage did not express feelings as a group which would suggest that they disliked school or that they experienced difficluty in their relationships with school personnel. More often than boys, married girls expressed strong desires to finish high school and continue in a post secondary education.

Vocational Aspirations

Vocational or professional aspirations of the dropouts and persisters have been reported as a part of SIB results. Through the written interview, however, an indicator of the time which they anticipate needing to reach their objectives is provided (see Table 27).

Male dropouts. The male dropouts, as opposed to male persisters, were far more "undecided" about the amount of time they may need to spend preparing to reach their goals (29% vs. 3%). Several of the male dropouts (6%) had real doubts that they would ever reach their vocational objectives; none of the persisters expressed such doubts.

It is interesting to note, when considering only those who were able to indicate a definite time, that a larger percentage of dropouts (85%) expected to reach their goals within five years than did persisters (63%). The difference can partially be explained by noting that 23 per cent of the dropouts

Table 27

Time Required to Reach Vocational Goals as Reported by Dropouts and Persisters

	MDO (N=82)	MP (N=91)	FDM (N=45)	FDU (N=22)	FP (N=60)
	%	%	%	%	%
I have it	14.6	1.1	17.8	9.1	3.3
1 year	4.9	5.5	15.6	18.2	10.0
2 years	8.5	5.5	4.4	13.6	18.3
3 years	7.3	3.3	15.6	9.1	13.3
4 years	12.2	28.6	6.7	0.0	25.0
5 years	7.3	17.6	6.7	4.6	8.3
6-10 years	7.3	30.8	4.4	4.6	10.0
11-15 years	2.4	3.3	0.0	0.0	0.0
16-20 years	0.0	0.0	0.0	4.6	0.0
21-25 years	0.0	1.1	0.0	0.0	0.0
Probably never	6.1	0.0	2.2	0.0	0.0
Undecided	29.3	3.3	26.7	36.4	11.7

Table 28

Individuals to Whom Dropouts and Persisters Look to as Models

		MDO (N=78)	MP (N=96)	FDM (N=42)	FDU (N=15)	FP (N=72)
Individuals		%	%	%	%	%
Father		12.8	21.9	4.8	13.3	8.3
Mother		0.0	2.1	14.3	13.3	15.3
Wife or husband		0.0	0.0	14.3	0.0	0.0
Sibling		3.8	2.1	7.1	6.7	11.1
Other relative		5.1	7.3	14.3	6.7	6.9
Friend		21.8	18.7	7.1	6.7	6.9
Teacher		6.4	7.3	9.5	6.7	19.4
Employer		5.1	0.0	0.0	0.0	0.0
Scientists		0.0	10.4	2.4	0.0	2.8
Political	JFK	7.7	3.1	2.4	0.0	4.3
	other	2.6	2.1	0.0	6.7	1.4
Entertainer		5.1	1.0	0.0	6.7	0.0
Sportsman		0.0	8.3	0.0	0.0	0.0
Religious		7.9	5.2	4.8	0.0	6.9
"No one"		16.7	6.2	7.1	0.0	2.8
Other		5.1	4.2	11.9	33.3	13.9

indicated that they already had reached their projected goal. Only one per cent of the persisters, on the other hand, had done so.

Female dropouts. Generally, the married female dropouts, unmarried female dropouts, and female persisters responded in a manner which suggested little intra-group variation. The majority of girls (94%, 85%, and 89% respectively) giving a time response, as opposed to "undecided" or "probably never," anticipated reaching their goals within five years. Twenty-five per cent of the married females so responding had already reached the goal (being a wife and mother, in most cases). The married and unmarried dropouts were more "undecided" (27% vs. 36%) with respect to time needed to reach their goals than were the female persisters (12%).

Individuals Admired

The way individuals feel about themselves and others is often reflected in their selection of individuals whom they admire. The dropouts and persisters were asked to name one person known personally or by reputation who they most admired. In Table 28 the findings are presented.

The boy dropouts differ from the male persisters in a number of ways. The dropouts tended to pick their fathers less than did persisters (13% vs. 22%). A similar ratio was obtained when combining the five headings related to family members (22% vs. 34%). Ten per cent of the persisters selected an individual related to science; no such person was listed by the dropouts. Dropouts picked political figures (JFK, in particular) to a greater extent (10% vs. 5%). No dropouts selected a sportsman to "look up to"; eight of the persisters did. Interestingly, 17 of the male dropouts wrote "no one" rather than list an individual. Of the persisters, six wrote "no one."

The married female dropouts (55%) tended to select family members to a greater extent than did unmarried dropouts (40%) or persisters (42%). Teachers were selected by 19 per cent of the persisters, whereas ten per cent of the married females and seven per cent of the unmarried dropouts preferred to nominate teachers.

Chapter Four
DISCUSSION

When the results of the 1964-65 Pennsylvania Statewide Survey of high school dropouts of high mental ability are compared with previously collected data about dropouts throughout the intellectual continuum in the Commonwealth and in other states, it is obvious that high ability dropouts are significantly different from other dropouts in several basic ways.

High ability dropouts stay in school longer. Whereas half of all dropouts have withdrawn before completing the tenth grade, three fourths of the bright dropouts leave during the eleventh or twelfth grades.

Perhaps the biggest reversal of general dropout data is in proportions of males and females leaving school. In this study 55 per cent of the dropouts were girls, but among dropouts in general more boys can be found. However, in Philadelphia 62 per cent of the high ability dropouts were male. The sex ratio in Philadelphia is more in keeping with figures for dropouts in general. If Philadelphia data reflect the metropolitan situation, intensive studies should be made of the characteristics of big-city, high ability male dropouts. It is quite possible that they present different characteristics from those found in this study based on high ability dropouts from the state as a whole.

Curricular Implications

High ability dropouts have curricular backgrounds that are different from dropouts of all ability levels. As could be expected, a greater proportion of the brighter dropouts were enrolled in a college preparatory curriculum and a smaller proportion were enrolled in the general and vocational curricula than all dropouts in general. These findings are in basic agreement with those of Nachman et al., (1964). Eventhough a smaller proportion of male dropouts of high ability than dropouts of all levels of ability were from the vocational and general curricula, more high ability youth withdrew from these curricula than the proportion of all youth so enrolled would suggest. Far more high ability girls in the commerical curriculum became dropouts than general enrollment or the dropouts rate for girls of all ability levels would suggest. Eventhough proportionally more dropouts of high ability came from the college preparatory curriculum than do dropouts in general, they account for only one quarter of high ability dropouts. More than two thirds of the high ability male dropouts were in general or vocational programs and more than two thirds of the high ability females were in general or commercial programs. Since nearly 80 per cent of dropouts of all intellectual levels were in these curricula as well, it seems that attention must be directed to those curricular offerings and the school activities available to students enrolled in them. Not only do the data collected in this study suggest a need for curricular revision in keeping with the needs of intellectually above average youth in non-college preparatory programs, but more strongly these data point to a need for developing means of providing for feelings of belonging, acceptance, and recognition for students in these programs. Dropouts tended to view their teachers as cold, aloof, uninterested in students and unable to keep classes moving with important and visibly helpful activities. Not only did dropouts feel a gulf between themselves and teachers, they also did not belong to formally organized student groups. The reason for this lack of participation was not determined.

Often the feeling of "aloneness" is passed off because "dropouts change schools frequently." The data from this study prove this to be an incorrect statement about dropouts of high ability. Dropouts in this study did not change schools more often than comparable groups of adolescents.

Employment Implications

Far more of the male dropouts, perhaps 30 per cent, are in military service than would be expected from data about young men in general. It was not possible to test and interview many servicemen, and so it is impossible to determine whether they are in the service because of their dedication to their country or more as a search for belonging, excitment, employment, or something else (such as being more assessible to the draft).

Regardless of their reason for being in the armed forces, those who are in the service are employed. And most of the other dropouts in this study are employed. Practically all of those who are not employed are in correctional or mental institutions or engaged in child rearing. The employment record is far brighter than reviews of literature about dropouts in general suggest. However, the fact that a dropout is employed does not assure that he is making effective use of his talent. If he is not making good use of his ability, both the individual and society suffer.

The employment survey presented several problems. Perhaps the greatest problem in determining employment status in Phase One involved the time of reporting job classification. In Table 9, 88 men of the dropout population were listed by school personnel as "remaining at home" and unemployment was suggested. Although it is not possible to report firm data, practically all of the males contacted in the second stage of the project were employed. The difference may be accounted for by inaccurate school records. Perhaps the high employment record of those tested is due to a certain shift in the job market to make employment somewhat easier to acquire than it was was at the time of the original survey or to a bias in the sample to permit those who were employed to be more readily contacted than those who were unemployed. The latter reason is unlikely because among those subjects who moved, most entered military service or became employed in some other way. Also the offer of a vocational interest inventory was, to many dropouts, an attractive aspect of the study.

On the other hand, many of those who were tested did not remain on the job that they accepted upon leaving high school. As expected they demonstrated a desire for upward mobility. They seem genuinely interested in more education and training. As they have the ability and desire to profit from training programs that have now been or will be established, a future survey of job classifications may provide additional insights into the employment problems of bright dropouts.

Will these subjects drop out of training programs as they did from high school? This study was not designed to answer that question, but did discover some overt, conscious reasons for withdrawal from high school as well as uncover some of the less recognized but extremely powerful influences on school attendance.

Reasons for Dropping Out

The most frequently given reasons by school personnel for the students' withdrawal from school prior to graduation center around age and need of work for boys and marriage for girls. The reasons given by dropouts themselves often differed considerably from those given by school personnel. Even so, the reasons given by dropouts are hard to evaluate. Many boys and girls were asked to leave in subtle and not-so-subtle ways. In many instances boys who dropped out to go to work have as much or more money than boys who stayed in school. Sometimes they dropped out to get a job so they could marry, afford a better car, express their independence, or search out a group in which they could feel as if they really belong. Many of the girls in this study married not because they had to, but because they found a person who appreciates them. Frequently those girls who marry before finishing high school are shy, retiring and non-adept in social situations. They tend not to seek new and unknown social situations. When they found someone who seemed to appreciate them and who enjoyed life as they did, these girls were ready to give up school to start homemaking. As the examples in the foregoing sentences suggest, the reasons youth withdraw from school are multiple and complex and not easy to discover. It was the purpose of this study to learn more about the characteristics of high school dropouts of high ability and to describe their feelings, beliefs, attitudes, and interests. By knowing them better, perhaps educational programs can be designed to help them make more efficient use of their potential.

Differences between Dropouts and Persisters

From the autobiographical information obtained through SIB items, a number of significant differences between dropouts and persisters were identified. The persisters, more often than dropouts, engage in group activities and participate in social situations involving others. Such activities, whether participated in within groups or individually, tend to be of a more intellectual or academic nature. Dropouts on the other hand engage more in building and repairing things. Dropouts have a tendency to prefer practical, concrete, no-nonsense situations. Although the persisters of this study are certainly not "joiners" and do not belong to groups as often as do the Project TALENT samples, they are members and leaders of groups more often than are the dropouts. Persisters were especially more active in subject matter clubs in school and in religious, charitable, and service organizations elsewhere. Also, persisters performed publicly more often in musical, athletic, and other activities. The personality characteristics mentioned in this paragraph are supported by HSPQ data.

In the HSPQ data, as well as in the SIB data, dropouts appear to be assertive, independent and striving for leadership roles which seldomly are obtained. School appears to the dropout as a place where he tried but was unsuccessful, and as a result he has given up on "his school" and is now looking elsewhere.

At school, dropouts did not see how class activities were valuable in the pursuit of vocational goals. They had trouble complying with the desires of teachers, especially in English, and recognized that teachers often felt their work was sloppy and of a quality that was barely sufficient enough to get by. They often felt they were reading without understanding. Apparently, as a result of these feelings and others expressed on the attitude scales, the grades of dropouts were generally lower than those of persisters who, as a group, possessed different attitudes. It is not clear whether persisters, more than dropouts, understand the ways in which school work relates to the world of work, really find classes interesting, and/or are more submissive to authority, but they report doing more than teachers require and react more positively to school situations.

While books and magazines seem to be equally available in the homes of dropouts and persisters, the reading interests of persisters are more academic in nature. One of the keys, then to the understanding of interest patterns of dropouts may be found in looking at the reading habits and skills of the dropouts. The presence of literature losses much of its importance when reading skills are ineffective. Comments of dropouts suggest problems in basic reading skills.

Still another possible area of concern might be the reading habits of the parents of dropouts. It may well be that the parents tend to collect literature but order the lives of the family members so that little opportunity or desire to read is provided.

Contrary to popular opinion, high ability dropouts do not start working for money earlier than persisters. In fact, the opposite is true. Dropouts started earning money at an older age than persisters. Since dropouts and persisters live in the same neighborhoods, it is unlikely that economic conditions restricted the dropouts' opportunities as a wage earner any more than they do those of the persisters.

Also contrary to popular opinion is the fact that dropouts do not move appreciably more often than students who graduate. However, since the research staff could not locate a large number of dropouts, the dropout sample may be biased in favor of those individuals who do not frequently move. Since most dropouts moved to establish independent homes with a marriage partner or to seek employment elsewhere, the sample may not be overly biased, however.

Several items from the SIB are often associated with personal and social adjustment. The numbers of the items are 38, 39, 83, 87, 94, 119, 130, 142, 148, and 149. In general, they focus attention on participation in activities, leadership, ability to pay attention, and physical health including such things as allergies, indigestion, and aches not serious enough to warrant seeing a doctor. From these items (and those from 1 to 37 which deal with participation in activities) the dropouts reveal that they believe they are socially less active, less frequently sought as a leader, less able to pay attention to teachers, and in poorer health than persisters. Several items refer to ability or inability to pay attention. Since the attention items are all directed at school situations, it is quite likely that instead of being distracted by their own thoughts to the extent of personal disorganizations, dropouts are merely reflecting their lack of interest in school life.

Similarities between Dropouts and Persisters

Dropouts and persisters hold many attitudes in common. Similarities are noted on attitudes toward such variables as receiving a good education, having a new car, owning a business, developing new ideas, being a good citizen, having self confidence, valuing their parents, being responsible, making good without college, getting along with people, and sticking to a job. Their perceptions of the thoughts of others about them are similar in many ways, too. Both groups think their friends view them as loyal, good natured and easy going. Most persisters and dropouts believe their parents think they are "capable of doing better." Also, both persisters and dropouts believe that their parents consider them to be good workers, healthy, humorous, good natured, easy going, good, and about average. In general, the attitudes expressed by dropouts and persisters are basically sound.

About half of the items in the lengthy (over 300 item) attitude scale do not differentiate dropouts from persisters. In very few instances are opposite attitudes held. When statistically significant differences are found, they are in degree of feeling. On more than half of the items for which differences have been found, persisters take a slightly stronger stand.

In regard to attitude toward school, both persisters and dropouts believe their parents value school, but that persisters' parents are more forceful in keeping their children in school. According to dropouts, their parents think they (dropouts) should value school more than they do. Perhaps these differences between dropouts and persisters exist because persisters valued school enough to stay. With greater feeling than persisters, dropouts state they they have had trouble getting in good classes, that few teachers really teach, and that they have had poor contact with teachers.

Other differences are noted in the ways dropouts and persisters characterize themselves. Persisters feel they are reliable, reverent, loyal, sincere, and team workers. Dropouts use such terms as a hard worker (but not in school), erratic, clever, and stubborn. Persisters, more so than dropouts, feel it is important to be respected by and to help others. These feelings are in basic agreement with the expressed interest in belonging to service and charitable organizations.

It is apparent that both dropouts and persisters feel it is difficult to get a good job if one is not a high school graduate. However, most of the dropouts have had success locating work and so do not consider getting a job to be as big a problem as do persisters. However, the terminology of the question asked them pertains to finding work instead of effective utilization of their talent. While the dropouts, except for the married females, have financial and value expectations for work that are similar to persisters, it remains to be seen whether their expectations will be fulfilled. Since most of the dropouts studied in Phase Two are seeking ways to continue their education, they may ultimately be successful.

As in their responses on other instruments, male and unmarried dropouts express on the attitude scales feelings of impatience, independence, energy, and a willingness to "go it alone" when necessary.

Implications from Personality Data

Looking at the male dropout in light of HSPQ data, he could be described in the following terms. He is a happy go lucky fellow who is interested in people. Although he tends to be easy going, his actions are marked with deliberateness and his speech with frankness. It would appear, at least there is reason to hypothesize, that the home in which he was a child, in comparison with that of the persister, was far more permissive and far less protective. His profile does not suggest disinterest in school *per se* and much that school represents, but it does indicate that the conforming nature of the school setting may have created a stumbling block for him. When considering this in light of the attitudes, interests, and so forth, which the male dropout possesses, it would appear clear that in order to help this kind of an individual maximize his ability, the school must be more willing to work with individuals rather than with classes. In many cases, it was noted most clearly that dropouts know what they want and are willing to leave school to get it. Often they find that without a diploma it is difficult, if not impossible, to reach their hoped-for goal. In many cases this forces them back to school, usually vocational training school. Others seek to obtain a diploma through equivalency examinations. The road would be far easier for these dropouts, in the long run, were public schools better equiped to provide vocational instruction to bright students who do not wish to be forced into the academic curriculum just because they possess a few more IQ points than most of the other students around them.

When looking at the overall response pattern of the male dropout, it becomes quite apparent that he falls well within normal limits with regard to his mental health (neuroticism, anxiety, etc.). He is, from all indications, a fairly sound individual. Hopefully, this should dispel the notion, at least regarding bright dropouts, that students who leave school before graduating are very often mentally unstable.

The unmarried female dropout is much like her male counterpart in personality makeup. She also has withdrawn from school for a number of reasons, reasons usually related to desire to work in vocations for which she could not find adequate training in the public schools. It would seem reasonable to suspect that in the American society, leaving school is often an indication, for a girl, of an independent spirit, probably more so than for boys.

This would not be expected to be true for the married girls, however. They left school, generally speaking, because they were pregnant. This does not, however, suggest that the pregnancy was necessarily an accident. Indeed, the personality make-up of the married dropouts would strongly suggest that pregnancy, usually extra-marital, provides an effective vehicle to the obtainment of goals. These girls could well be described as "home bodies." They seek comfort in relatively non-social, but definitely not non-personal, activities. Interview data strongly points to these girls as being devoted wives and mothers. Just what schools can do to assist these dropouts is less than clear. It is likely, however, that curriculum emphasizing home management might be one avenue to retaining these girls through graduation.

Vocational Interests of Dropouts

The responses of persisters and dropouts on the MVII are similar. Not only are the responses of dropouts and persisters similar, but there is also basic agreement between boys and girls. Perhaps the patterns are alike because they were obtained from adolescents who are without much work experience. The stability of interest patterns among mature young adolescents has often been questioned. Even if the interests do not reflect stability over time, they reflect the current thoughts of youth in need of vocational training and experience.

Although the order of popularity varied for boys and girls, five Area or homogeneous scales were popular. They were Sales-Office, Office Work, Health Service, Clean Hands, and Food Service. Explanations of the scales as found in the following paragraphs were obtained from the MVII manual.

Two clusters of content are indicated by the Sales-Office items. The larger cluster deals with a variety of verbal activities, while the other indicates interest in aesthetics. A few of the items express interest in people. Other items seem related only in that they are concerned with socially accepted and highly thought of activities. High scores are made by retail sales clerks, new car salesman, painters and persons engaged in office work.

Interests in general clerical work and office machine operation, bookkeeping and accounting, and office management are indicated by items on the Office Work Scale. High scores are made by disbursing clerks, tabulating machine operators, personnel clerks, and bookkeepers.

The Health Service Scale reflects interests in medical and hospital related services, activities and occupations, and in working in medical, biological, or chemical laboratories. High scores are made on this scale by hospital corpsmen, hospital attendants and dental technicians.

There seems to be no easily interpretable common theme indicated by the "Clean Hands" items except that high scores reflect a preference for activities in which one can stay clean.

The Food Service items are different both from those for the health service and clean hands scales. Food Service items are concerned almost completely with interests in the preparation of food and menu planning. High scores are made by stewards, bakers, and confectioners.

Most of the popular Occupational Scales are included in the Area Scales mentioned above. However, both Warehouseman and Truck Mechanic scales were often found to be significantly high. Warehouseman appeared on the male and female lists of popular scales. Warehouseman is positively correlated with white collar and clerical jobs and it is likely that the desires for white collar activities brought scores on that scale up even though a white collar is seldom thought of for warehousemen.

The Truck Mechanic Scale presents a different situation. This scale was popular with boys (and not with girls). It is negatively correlated with white collar jobs and positively correlated with such scales as sheet metal workers, plumbers, machinist and electricians. It is highly possible that as boys with interests now labeled as "Truck Mechanic" mature, their interests will spread into these higly correlated areas that are not now mentioned with much force.

The terminology of occupations is often unfamiliar to young persons seeking employment. They often reject some jobs and ask for others because of stereotypes, prestige factors, or other irrelevant considerations such as "Uncle Harry," hours of work, or the choice of a friend. The use of an inventory which can be scored to indicate the similarity between the individual's interests and those of men in specific occupational groups can be quite helpful in effectively placing personnel in jobs.

To assume that dropouts, even dropouts of high ability, have similar interests or even job potential is to fail to understand the heterogeneity of humans. It is somewhat surprising to find that both dropouts and persisters have similar although not identical, interest patterns. Although the areas listed above can be considered as suggested fields for which training programs might be developed and/or maintained, each potential enrollee should have a careful assessment of his potentialities including interests before starting.

Perhaps an even greater value to be derived form the use of the MVII with the subjects in this study will be the development of a dropout-persister scale for high school youth to go with the occupation scales already available. Such a scale when fully validated would be helpful to counselors as they talk with students about vocations and at the same time search for ways of modifying the potential dropout's behavior and attitudes so that he will persist in appropriate educational programs.

Chapter Five

CONCLUSIONS AND IMPLICATIONS

In 1961, Pennsylvania high schools graduated 73 per cent of the students who entered ninth grade four years earlier. In 1965, Pennsylvania high schools graduated 84 per cent of their students. The admonitions, encouragements, and promises used to reduce the number of dropouts, through those four years were not sufficient to keep the subjects of the present investigation from withdrawing from school before graduation. Even in the face of spirited efforts on the part of educators and civic minded leaders to make students aware of the need to finish high school, the subjects of this study withdrew. In this chapter the authors will go somewhat beyond the data to suggest ways which might be successful in reaching young individuals who, like the dropouts, feel they have cause to terminate their education prematurely. Suggestions will be offered which may assist in improving educational opportunities for this group. It must be kept in mind that the recommendations are based upon data relating to dropouts and persisters who are above average intellectually and are not necessarily generalizable to other intellectual groups.

Some frequenlty mentioned correlates of school withdrawal were not substantiated in the findings of this study. Noticeably absent from the dropout data are indications of frequent school transfers, early part time employment, unemployment upon leaving school, generally low parental education, and lower parental employment status. What is noticed is that dropouts differ from persisters in such areas as personality, interests, educational skills, and family orientation toward school processes.

Although much could be said regarding needed programs to improve the attitudes of parents concerning such matters as the importance of reading in the home, the role of education in later life, and the need of firm home leadership, the recommendations presented in this chapter will be addressed to the improvement of educational practices within the schools and to possibilities for future research.

Educational Recommendations

Male Dropouts

Vocational training. Although measured vocational interests of dropouts were not unlike those of the persister group, there are important differences. The dropouts expressed slightly less interest in areas involving service and social contact and slightly more interest in activities in which they could be relatively independent of their peers. In the light of autobiographical (SIB) data, it would be stated with confidence that the dropouts are more oriented toward the trades and the persisters are more concerned with professions. Further, and perhaps of most importance, dropouts anticipate entering the world of work immediately; persisters tend to be looking forward to more education beyond high school.

With this in mind, several recommendations are offered with the end objective being the more meaningful realization of the potential of intellectually superior male dropouts.

First, although the dropouts anticipate employment in the trades, a large percentage of them were in a "general" curriculum. Whether this would suggest that the dropouts were vocationally disoriented and undecided or that the schools did not offer vocational training is not known. If the former is the case, then a more comprehensive system of vocational guidance would seem to be in order. It seems important to devise ways of providing information to students about all professional and non-professional jobs so that they can select training and enter occupations in which they can progress, making full use of their intellectual ability.

Second, what most of the dropouts want of the school is "practical" courses which will assist them in "living in the real world." There is reason to believe that their perception of the content of many courses and sequences of courses is not altogether unrealistic but that their perception of work and non-student days may be unrealistic. Not only should course content and sequence be examined with the idea of making them as meaningful and practical as is possible, but there is need of part time work for students and on-the-job training for workers. A guided and gradual entry into the role of wage earner seems to be very desirable. As programs develop to pay potential dropouts for work around school or for part time employment elsewhere, attention needs to be given to the objectives of such programs. Dropouts seemed to need help in planning for the use of money. (But amount of expected earnings did not keep dropouts in school. Most dropouts believed they could eventually get a better job and earn more money if they finished high school.)

Attitudes of dropouts toward classes and teachers must change if they are to profit from staying in school. Potential dropouts must find school interesting and helpful if they are to profit from attending. A number of dropouts want to go back to school now that they have experienced full time employment. However, the social pressures of being in classes with younger adolescents keep them from returning. These pressures can be reduced in some school organizations. Also, the "evening school," community college, and/or specific vocational training programs hold considerable promise for students as they gradually enter the role of full time wage earner. Part time employment coordinated with school programing and formal education of workers are not new concepts, but they have been difficult to coordinate because they place additional demands upon school personnel.

Third, if it is true that some schools aren't offering vocational training which is of sufficient quantity and/or quality, then the necessary changes are obvious. In spite of the fact of an ever increasing number of students extend their education in colleges and universities, there are still large numbers of boys who must rely only upon a high school education. Many, if not most of these young men of high ability will perform vocational tasks which demand skill and training. Frequently, the lack of such training forces the individual into less demanding endeavors or into very special on-the-job training programs sponsored by employers. The number of trade oriented high school courses can be increased and the content and method of others can be improved to better meet the needs of high ability youth. Dropouts in this study desired more opportunity to arrange for good classes with understanding teachers in all curricular offerings. "If they had helped me instead of lecturing to me..." was a theme frequently observed. Diversified learning activities to meet the needs of bright, average, and dull students in each curriculum and especially to meet the needs of bright students in vocational and commercial courses was frequently requested by students in this study.

Fourth, the commonly held notion that bright students should be expected to attend traditional college programs is possibly an important variable in the dropping out process. Such a notion leads naturally to the conclusion that bright boys who go into the trades have lowered their standards and are, consequently, failing to use their talents wisely. But such an idea overlooks other equally important personal variables which influence life decisions. The social status, family orientation, interests and attitudes of the student, must be considered. And, there is the matter of value of services. Can it be stated in truth that the services of a dentist are of more value than those of a skilled auto mechanic? And is the public accountant to be more respected than the carpenter? The interdependence of the one upon the other makes comparisons meaningless. Yet, bright students are often expected to go into the academic curriculum as a matter of course. When failure is apparent, they are transferred to another curriculum. What is needed, then, is a fostering in parents, students, and teachers alike, of respect for non-professional occupations and an awareness of the serious need for bright boys to enter a wide variety of intellectually demanding occupations. With such an attitude as a backdrop, the bright boy with vocational interests is not only more likely to find the training he desires, but he will find the respect which will assist him to feel a part of the academic community.

Educational assistance. It is possible, in light of their academic success, or lack of it (particularly in English), that the male dropouts of high intellectual ability left school because of lack of basic language skills. Such difficulties as would result from poor language ability might well have led to interests in vocational training as a logical substitute for professional instruction demanding a high level of English usage. Early identification of deficits in learning skills is essential for effective remedial assistance. It would seem particularly important to be aware of the bright student with learning difficulties and to take necessary steps to overcome the deficiencies as early as possible.

Educational insight. Although most of the dropouts who were studied intensively in this project desire additional training, they want practical, educational activities that appear to be directly preparing them for the "real world." They tend to reject many of the more academic courses, such as U.S. and world history, geography, English, and the like. They generally wanted training for specific trades or courses which directly met their interests. It is quite clear that the dropouts do not understand why certain courses are mandatory of all students. It would be very desirable if teachers would help students better understand the contribution of each course in preparing them for the present and the future. Students need to understand the benefit to be derived from the course; and they need to feel that they are making progress toward their goals. Such insight may be a key to satisfying the needs of many potential dropouts.

Individualism. The male dropouts differ from the persisters in many ways, an important one being personality. Significantly, the male dropouts are less comfortable in settings which demand conformity; they might be termed "individualists." Somehow the schools must, in the face of larger student bodies, personalize the educational process to the extent that it can accommodate individuals similar to those who formed the dropouts sample in this study. There needs to be a place in our schools for divergent thought, and such individualizm needs to be encouraged to the extent that it does not come into major conflict with educational advancement of others.

Recruitment. To this point the discussion has dealt with retaining potential dropouts. Several comments need to be made, however, regarding present dropouts. A number of the male dropouts want to go back to high school now that they have experienced full time employment. Unfortunately, there are pressures which make this difficult. For one thing, the dropouts would be considerably older than his new classmates. More important, most dropouts have established some degree of financial independence. This is particularly true of the married male dropout. Where does the support come from for his family while he is in school? Professional educators know that there are ways to overcome such problems, but dropouts often do not. Because the dropout is often unaware of the many resources of public education to train him, there is real need to find the dropout and bring this information to him.

It was interesting to note that several dropouts who were contacted as possible subjects for the present study returned to school as a result. A concerted effort must be made to prevent the dropouts from "dropping out of sight." And there should be a systematic program of contacts, not only with the idea of bringing the dropout back to high school, but to provide other forms of assistance as well. The schools, for example, should be the primary source of information regarding the resources of other community agencies which might provide the kind of assistance best suited to the dropout. In turn, such follow-up studies will assist school personnel in revising current programs in keeping with student needs.

Unmarried Female Dropouts

By in large, what has been said of the male dropouts is equally true of the unmarried female dropout. The need for adequate early orientation and preparation is equally evident. She, also, must be helped to feel a part of the educational process and gain insight into the ultimate value which it has for her.

Married Female Dropouts

Two-thirds of the girls who withdrew from school prior to graduation did so because of pregnancy and/or marriage. These girls and an undetermined number of boys discontinued school in order to assume an appropriate marriage role (i.e., housewife or wage earner). The overall findings of this study would suggest that the girls who married, and consequently did not complete high school, are basically content with their present status. Looking at them from the "recently dropped out" viewpoint of this investigation gives one the definite impression that for these girls, at least, the lack of a high school diploma is not going to seriously effect their future lives.

It is reasonable to ask whether or not what they did learn will be of benefit to them now that they are out of school. The answer will not be found here. If, however, the role of housewife and mother is considered to be the profession of these girls, then the schools will have been completely successful in preparing them for their lifes' work only to the extent that the training program provided instruction which has led to constructive attitudes toward sex and marriage, home management, child rearing, and so forth.

Many of these girls express interest in obtaining more training which would permit them to work or which would at least provide them with the satisfaction of having graduated. There is need, therefore, of systematic contact with girls leaving school because of pregnancy and/or marriage. An opportunity to obtain further education and training should be provided as desired and needed. In many instances, training will need to be provided and employment conditions arranged for mothers of young children so that both mother and child are in healthy emotional climates. These girls are the segment of the dropout population which probably is most overlooked.

Male and Female Dropouts

Activities which help develop social skills seem to be needed by potential dropouts. In many schools male and female dropouts did not participate as often as persisters in activities which develop feelings of self respect, belonging, and acceptance. Although such activities are available for many students, the dropouts in this study sought but were unable to obtain as much participation in group activities as did persisters or as they wanted. Direct attention to, but perhaps subtle guidance in, social development seems highly desirable. In many schools new organizations will be necessary to provide for these students.

Most of the recommendations given for overcoming several aspects of the dropout problem among high ability youth are in no way new to educators. In fact, most of the recommendations have already been put into practice by many schools. What is needed, therefore, is a serious re-evaluation of what is presently being done with a particular student in mind--the bright student who is a potential or actual dropout. The extent to which present programs are meeting the needs of this group will determine the degree to which change is necessary.

Research Recommendations

What this study has done is to scratch the surface. Much more investigation must be undertaken in order to understand the dropout of high intellectual ability. Researchable questions are suggested on almost every page of the results chapter. A few areas will be briefly mentioned as illustrations.

1. Attitude inventory, interview, and HSPQ data suggest that the parents of the male and unmarried female dropouts are relatively unconcerned and unstructuring in their childrearing practices. A study of family correlates would be very informative.

2. It has been mentioned already on several occasions that the dropouts appear too weak in certain learning skills. What needs to be determined is the extent to which these weaknesses influence the selection of careers and the decision to withdraw from school.

3. Of course, there will be value in long range study of the effect of early withdrawal upon bright boys and girls. Can they overcome the handicaps of not having a diploma? How many return to school or in other ways gain further training? How does dropping out effect marital success? Many questions such as these need answers.

4. There is need to look at subgroups within the IQ range of this study. Some preliminary study of this kind was indicated in Chapter Three. Much more should be done. There could also be benefit in comparing personality patterns among this group. Economic level and parental attitude would provide other fruitful subclassifications for study.

5. Much more needs to be done with instruments to identify potential dropouts and student dissatisfaction.

6. And, there is the matter of replication of what has been done in the present investigation in different geographic settings.

Chapter Six

SUMMARY

In many respects the American people were blessed when the Russians placed Sputnik I into orbit less than a decade ago, for that event caused all segments of our society to take a close and searching look at the American educational system. A clamor of alarm was heard across the nation, for example, as suddenly increasing publicity was given to the high rate at which boys and girls were leaving our schools before graduating. The number of dropout studies and surveys dramatically increased; programs were undertaken designed to keep students in school. At the same time, in an attempt to bolster American technology, an energetic effort was begun to locate the gifted and provide them with the opportunities considered necessary to maximize their talent. In the light of this concern for the bright student, it is rather surprising that there has been so little investigation of the dropout of above average ability. The Pennsylvania study of dropouts of high ability is an attempt to provide some of the needed information concerning this particular group.

The subjects were 125 male and 81 female dropouts and a like number of male and female persisters of comparable IQ ($\overline{X}$ = 117), neighborhood, and grade at the time of withdrawal. The dropout sample was drawn from all Pennsylvania boys and girls known to have discontinued school before graduation during the 1964-65 school year. The persisters were selected by 63 counselors and school psychologists located in the schools at which the dropouts had previously been enrolled.

The subjects of the study were classified into three groups for comparative purposes: male dropouts (N=125), female unmarried dropouts (N=26), and female married dropouts (N=55). The data obtained generally fell into one of four classifications: descriptive information, personality, attitudes, and vocational and educational interests. The instruments used were the High School Personality Questionnaire, the Minnesota Vocational Interest Inventory, the Student Information Blank based on Project TALENT items, and a battery of attitude scales specifically designed for the study.

Descriptive Information

Only seven per cent of the public and private schools did not reply to a request for a complete listing of high ability dropouts. Of the names submitted, 1,721 met the criterion for inclusion. They represented .27 per cent of the total state enrollment of grades nine through 12. Fifty-five per cent of the high ability dropout population were females. The modal dropout grade for both boys and girls was grade 11 (approximately 40 per cent of each group); nearly as many (approximately 35 per cent of each group) left school in the twelfth grade. Of the boys, nearly half (46 per cent) were enrolled in general curriculum, and 26 per cent were in college preparatory, 21 per cent in vocational, and seven per cent in commercial curricula. Fifty-one per cent of the girls were in commercial study; the others were in college preparatory (28 per cent), general (18 per cent), and vocational (two per cent) curricula. It was found that the brighter dropouts (IQ 120 and above) tended more often to be enrolled in college preparatory courses. The reasons supplied by school personnel for student withdrawal were varied, but approximately 60 per cent of the boys were reported to have left school because they "passed required age" or entered the armed forces, and a similar percentage of the girls were reported to have left because of pregnancy and/or marriage.

The descriptive data obtained from the sample suggest that the subjects were representative. Because of this, the differences noted between the reasons for withdrawal as given by school personnel and the dropouts themselves were not considered to be a function of bias due to sampling. The majority of the male dropouts, in their words, left school because they did not like school (20 per cent), they were asked to leave (18 per cent), they wanted to get a job (17 per cent), or because they wanted to get married (11 per cent). Twenty per cent of the unmarried female dropouts left school because they did not like it; others left to get a job (16 per cent), because of failing grades (12 per cent), or because they were needed at home (12 per cent). A large majority (82 per cent) of the married females left school to be married.

Personality

The male dropouts, when compared with the persisters, were found to be more uninhibited and happy-go-lucky. Although they tended to be easy going, their actions were marked with deliberateness and frankness of speech. The dropouts boys were more assertive, independent, unconventional, and rebellious than the persisters. It is suggested that their parental homes, in comparison with those of the persisters, were more permissive and less protective. Interestingly, the personality profile of the dropouts did not suggest that they rejected learning, but it did indicate that the conforming nature of the school setting might have created a stumbling block for them. And their overall response pattern would suggest that they fell well within normal limits with regard to their mental health. They were, from all indications, fairly sound individuals.

The girls dropping out of school for reasons other than marriage were very similar to the boys. The personality differences which were noted were slight and sex appropriate. The description of the male dropouts, then, would basically apply to the unmarried female dropouts.

The girls who withdrew because of pregnancy and/or marriage were far less socially oriented than the persisters; they were less prone to seek social recognition. Also, they were more inclined to work alone, preferring things or words to people. These girls could be described as tending to be shy and retiring. Their personality pattern would indicate reason to suspect proneness to poor social adjustment in junior and senior high school.

Attitudes

Seldom did dropouts express attitudes which were opposite to those of persisters. The differences found were generally a matter of degree. Both the male dropouts and persisters, for example, believed that their parents considered school to be important; the dropouts were not as implicit however. Male dropouts did not demonstrate a truly negative attitude toward the schools. They did point to a number of areas which they found to be difficult to accept. They often expressed concern that schools are not preparing students for the "real" world. Lack of student involvement in the selection of courses to be taken was considered to be handicapping, for they felt that students best know their own needs and expectations. There also appeared to be an emotional gap between the male dropouts and their teachers. The dropouts were not inclined to describe their teachers as being well prepared, knowledgeable with regard to subject matter, or concerned about the feelings and needs of the students. "Favoritism" was a problem listed by a number of dropouts. Dropouts tended to complain about the strong forces within the schools to conform. More than did the persisters, they expressed the importance of being able to be an individual.

The attitudes of the unmarried female dropouts were similar to those of the boys. They also expressed the notion that school training did not meet their needs as related to their vocational or professional goals. Although these girls also appeared to be estranged from their teachers, there was little reference made to unfair treatment or favoritism.

The married female dropouts were more similar to persisters than to the unmarried female dropouts in their attitudes. They did not appear to feel as if teachers were partial in their treatment of students nor were they unhappy with their courses. They did, more so than the persisters or unmarried female dropouts, feel as if their parents weren't satisfied with the school setting.

Vocational Interests

The male dropouts differed significantly from the persisters in three of the nine vocational areas measured by the Minnesota Vocational Interest Inventory--Mechanical,Health Services, and Sales-Office. The dropouts expressed greater interest in mechanical activities, such as machine operation and design, home repairs of mechanical and electronical gadgets, and other similar activities. The persisters, on the other hand, demonstrated greater interest in medical related activities, such as working in medical or chemical laboratories. They also expressed greater interest in Sales-Office (better termed "Cultural-Aesthetic") activities. The items which form this scale deal with activities related to speaking and writing, art and music, and other socially accepted "highly thought of" activities.

The unmarried female dropouts showed interest patterns which were low in the more typically masculine areas (Mechanical, Electronics, Carpentry, and Outdoors) and high in the more feminine areas (Office Work, Food Service, Sales-Office). The pattern of the female persisters was highly similar. As interest patterns for the females are considered, it must be kept in mind that the norms of the inventory are based on male responses only.

Significant differences were found between the married female dropouts and female persisters. The married dropout girls were more interested in office work. These interests are related to such activities as clerical work, bookkeeping and accounting, and so forth. The persisters had a higher level of interest in "Cultural-Aesthetic" areas. It is noteworthy that the unmarried dropout girls were more interested in "Cultural-Aesthetic" area activities that were the married female dropouts.

Interests are often reflected in aspirations held. Of the male dropouts, only 22 per cent anticipated a professional, as opposed to a trade, career; 60 per cent of the persisters looked forward to a profession. Although 95 per cent of the male dropouts were employed (85 per cent full time), it was obvious from many of their test and interview responses that most of them had not as yet reached their vocational or professional goals. This was also reflected in the large number of dropouts engaged in some sort of educational endeavor, such as night school, correspondence school, or high school equivalency work. Ninety per cent of the dropouts stated that they were interested in furthering their education.

Thirty-five per cent of the unmarried female dropouts expected a professional career; 56 per cent of the persisters also anticipated a similar level of work. Only 15 per cent of the married female dropouts had such high expectations. On the other hand, 49 per cent of the married girls looked to the role of housewife as their life's work, while 19 per cent of the unmarried dropouts and only seven per cent of the persisters held similar views. Sixty-four per cent of the unmarried dropouts and 48 per cent of the married dropouts were employed, with 52 per cent and 34 per cent, respectively, working, full time. Eighty-eight per cent of the unmarried dropouts and 92 per cent of the married dropouts were either involved in educational activities or expressed interest in doing so.

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Appendix A

Forms used in Phase One

THE SUPERINTENDENT

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF PUBLIC INSTRUCTION
BOX 911, HARRISBURG
17126

April 12, 1965

TO: Secondary School Principals

The Pennsylvania State University has requested our cooperation to undertake a statewide survey of dropouts of high ability to determine their current employment status. Present indices indicate that there are about 4,000 adolescents in Pennsylvania who have IQs of 110 or higher and who have, since June 1964, withdrawn from school without graduating. The principal investigator of the study, Dr. Joseph L. French, is hopeful of listing every dropout of this intellectual level from Pennsylvania's schools. The employment status of these dropouts will be assessed, and from this population, a sample will be selected for intensive study.

The Division of Vocational and Technical Education of the U.S. Office of Education has granted funds to assist in this investigation. I would like to request that each administrative unit containing grades 9 through 12 review their records and complete the forms which are enclosed. Recognizing that this is an expensive and time-consuming task, the investigator has been authorized to provide $1.00 for each name and set of supplementary information that you are able to supply. Instructions for completing the forms are enclosed.

To accurately describe the research population specified by this study, it is essential that each school in the Commonwealth respond. Requests for additional information or forms should be directed to the principal investigator, whose address is listed below.

Dr. Joseph L. French
Department of Special Education
Room 108 EPC II
The Pennsylvania State University
University Park, Pennsylvania 16802

Sincerely yours,

George W. Hoffman

George W. Hoffman
Acting Superintendent

INSTRUCTIONS FOR COMPLETING THE PENNSYLVANIA STATEWIDE DROPOUT SURVEY

Review the list of withdrawals from grades nine through twelve since June, 1964. List all of the dropouts who have IQs of 110 or higher as defined below on the enclosed forms with the requested information.

A dropout is a former student who withdrew without graduating since last June for any reason other than the following: illness, death, transferring to another school.

Further, to be listed on this roster, an IQ of 110 or above should have been recorded for each dropout during the preceding four years. If more than one IQ has been recorded, list the name of the dropout if one IQ during the past four years was 110 or higher. The accompanying data form should show all IQs recorded, the name of the tests used, and dates of administration. Use the back of the form to record intelligence test information when necessary.

Most of the information requested will be available in the school records. However, when a former student or the parents of a former student reside within 100 miles, a telephone call should be placed to verify the current address, current daily activity, and employment status. When the former student is not close by, his current location and activity can be verified by a friend or a friend of the family.

Use the following code to fill in the blanks on the roster:

1. Name of former student
2. Sex
3. Birthday
4. Last known street address, town and telephone number
5. Date of last school attendance

6 - 12. Academic average for each grade (6, 7, 8, 9, 10, 11, 12), if available

13. Reason for withdrawal
14. Grade (class or year) classification during last enrollment
15. Curriculum classification during last enrollment
16. Father's name
17. Mother's name
18. Names of 1 to 3 close friends, if available
19. Number of school transfers (Do not include elem. to jr. high or jr. high to sr. high.)
20. Most recent IQ
21. Name and form of intelligence test
22. Date of administration of intelligence test
23. Next most recent IQ, if available
24. Name and form of intelligence test
25. Date of administration of intelligence test
26. Last known daily activity and means of verification
27. Average weekly hours employed and salary, if available
28. On the back of the form note the response of the parent to the following questions: a) How do you feel that_____is getting along? b) Why do you feel that way? c) What changes would you like to see made in our schools to help people like____?

Return all forms to:

J. L. French
Department of Special Education
Room 108 EPC II
The Pennsylvania State University
University Park, Pennsylvania 16802

Pennsylvania Dropout Survey

Example A

1. Joseph Jonathon Dough				2. Male	3. March 6, 1948	
4. 1416 Potterstown Rd., Anytown 238-4567					5. Oct. 26, 1964	
6. B	7. B	8. C	9. C	10. C	11. C	12. none
13. Seek employment				14. Jr.	15. Academic	
16. William Edward Dough				17. Jane Martha Dough		
18. John Brown, Jim Jones						19. none
20. 111	21. Henmon-Nelson A 9-12				22. Oct. 13, 1964	
23. 105	24. Henmon-Nelson B 6-9				25. Oct. 12, 1962	
26. Bakers helper, telephone - Joe Dough					27. 40 hrs. @ $50 wk.	

Example B

1. Mary Margaret Brownowski Smith				2. Female	3. May 28, 1947	
4. RR 3 Pennsborough 456-2143					5. Xmas Vacation 1964	
6. B	7. C	8. B	9. B	10. C	11. C	12. none
13. Marriage				14. Sr.	15. General	
16. Deceased				17. Isabelle Brownowski		
18. Unknown						19. one
20. 122	21. Lorge-Thorndike K				22. Nov. 1964	
23. none	24. none				25. none	
26. Housewife and grocery clerk - talk to mother					27. 20 hrs. @ $20 wk.	

1.				2.	3.	
4.					5.	
6.	7.	8.	9.	10.	11.	12.
13.				14.	15.	
16.				17.		
18.						19.
20.	21.				22.	
23.	24.				25.	
26.					27.	

School: ______________________________ Date ________________

School Record Form
Pennsylvania Statewide Dropout Study

To: J. L. French, Principal Investigator
Department of Special Education
108 EPC II
The Pennsylvania State University
University Park, Pennsylvania 16802

For: Expenses in connection with survey

Honorarium at $1 for each of _____ completed cases. $________

Postage: ______________________________

____

Total: ________

Telephone: ______________________________

____

Total: ________

Other Expenses: ______________________________

____

Total Other Expenses: ________

Total: $________

Please make payment to: ____________________

Title: ____________________

Address: ____________________

____

____

May 31, 1965

TO: Secondary School Principals

The responses received to date on the statewide Dropout Survey, which was initiated in April by The Pennsylvania State University through the cooperation of the Department of Public Instruction, have shown in almost all instances conscientious investigation and reporting by those gathering the information. However, there have been several areas we have evidently not clearly defined.

The definition as to who may be considered a dropout does include those individuals who have withdrawn for reason of pregnancy and also those who have been withdrawn because they were sentenced to institutions for other than medical reasons. While the dropout rate is highest in the 11th and 12th grades, we are interested in the report covering grades 9 through 12 inclusive.

Since this phase of the project is scheduled for completion in the middle of June, I will be most glad to hear from you if you have any problems at present concerning the Survey, or find any developing. Please feel free to contact me by letter at the address listed below or telephone collect to: 814-865-9261.

Joseph L. French
Department of Special Education
Room 108 EPC II
The Pennsylvania State University
University Park, Pennsylvania 16802

July 12, 1965

TO : Secondary School Principals

In an attempt to make the Dropout Survey as complete as possible, I have delayed the termination of this phase of the research in order that I might get returns from as many schools as possible. Anticipating that in a number of cases the forms are no longer available to those in a position to get the information during the summer months, I am taking the liberty of enclosing a duplicate set.

To clarify an area where there may have been some ambiguity, the definition as to who may be considered a dropout does include those individuals who have withdrawn for reasons of pregnancy and also those who have been withdrawn because they were sentenced to institutions for other than medical reasons. While the dropout rate is highest in the 11th and 12th grades, we are interested in the report covering grades 9 through 12 inclusive for the period June 1964 to the end of the school year, June 1965. If your school has been previously included in a report with another school, I would appreciate your noting this on the form when it is returned.

The "intensive study" of selected dropouts, as stated in Dr. Hoffman's letter, will be conducted later this year. If any of the yet to be selected dropouts for testing and interviewing are from your area, I should like to be able to talk with you at a later date regarding procedures for best handling the interviews in line with your school's policies.

If for any reason you might be encountering some difficulty relative to the Survey, please feel free to call me at the university. The number is 865-9261.

Joseph L. French, Professor
Room 108 EPC II
The Pennsylvania State University
University Park, Pennsylvania

Encl: 1 set of dropout forms

Appendix B

Student Information Blank, Part I

Significant items are identified in Table B-1 on page B-10

STUDENT INFORMATION BLANK

Directions: These questions are about yourself, your family, and your plans for the future. This is not a test, and there are no right or wrong answers. Answer each question sincerely and thoughtfully as it applies to you. All answers will be returned to the people conducting this study and will be held in strict confidence.

Answer every question. For each question you are to mark one answer and only one answer. Be sure to read each question carefully, and then mark your answer in the appropriate space on your answer sheet. Some of the questions may be difficult for you to answer. Do not spend too much time on these questions, but mark the one best answer, and then go on to the next question. You should answer each question. Now, go ahead and answer the questions.

Items 1 - 27. How often have you done any one or more of the following in the past 3 years? Include extra-curricular activities at school, but do not include things done for school assignments. In each group of activities, answer for one or more in the group. Mark your answers as follows:

A. Very often
B. Often
C. Occasionally
D. Rarely
E. Never

1. Drawing, painting, molding, sculpturing, or decorating
2. Acting, singing, dancing, or playing a musical instrument for a public performance
3. Collecting stamps, coins, rocks, insects, etc.
4. Building model airplanes, ships, trains, cars, etc.
5. Working with photographic equipment (do not include taking occasional snapshots)
6. Making jewelry, pottery, or leather work
7. Making or repairing electrical or electronic equipment
8. Cabinet making or woodworking
9. Metal working
10. Mechanical or auto repair
11. Raising or caring for animals or pets
12. Sewing, knitting, crocheting, or embroidering
13. Cooking
14. Playing baseball, football, or basketball
15. Gardening, raising flowers, or raising vegetables
16. Hunting or fishing
17. Attending concerts, lectures, plays (not motion pictures), ballet
18. Visiting art galleries or museums
19. Playing golf or tennis
20. Swimming
21. Playing hockey, lacrosse, handball, or soccer
22. Boxing, wrestling
23. Track, field events
24. Going bicycling
25. Ice skating, skiing, or sleighing
26. Horseback riding
27. Boating, water skiing

Items 28 - 37. How active have you been in any one or more of the following organizations? Mark your answers as follows:

- A. Extremely active
- B. Fairly active
- C. A member, but not very active
- D. A member, but rarely active
- E. Not a member of any of these organizations

28. School newspaper, magazine, or annual
29. School subject-matter clubs, such as science, mathematics, language, or history clubs
30. Dramatics, or musical clubs or organizations
31. Hobby clubs, such as photography, model building, electronics, woodworking, crafts, etc.
32. Farm youth groups, such as 4-H Club, Future Farmers of America, etc.
33. Church, religious, or charitable organizations, such as Catholic Youth of America, B'nai B'rith Youth Organization, Protestant youth group; organized nonschool youth groups such as YMCA, YWCA, Boy's Club, etc.
34. Political club, such as Young Democrats or Republicans
35. Social clubs, fraternities, or sororities
36. Scout, Campfire, or similar groups
37. Safety Patrol

38. How many times have you been president of a class, a club, or other organization (other than athletic) in the last 3 years?

- A. None
- B. Once
- C. Twice
- D. Three times
- E. Four or more times

39. How many times have you been an officer or committee chairman (other than president) of a class, a club, or other organization (other than athletic) in the last 3 years?

- A. None
- B. Once
- C. Twice
- D. Three times
- E. Four or more times

40. How many times in the last 3 years have you been captain of an athletic team?

- A. None
- B. Once
- C. Twice
- D. Three times
- E. Four or more times

41. On the average, how many hours a week do you spend doing work or chores around the house?

- A. None
- B. One to three
- C. Four to six
- D. Seven to nine
- E. Ten or more

42. How old were you when you first started earning money? Do not count money earned for doing chores around the house.

- A. 10 or younger
- B. 11 or 12
- C. 13 or 14
- D. 15 or 16
- E. 17 or older

43. As a child I could make a mess with toys, clay, paint, paper, mud, or similar play things.

- A. Never
- B. Rarely
- C. Occasionally
- D. Often
- E. As often as I wanted

44. How many books have you read (not including those required for school) in the past 12 months? Do not count magazines or comic books.

- A. None
- B. 1 to 5
- C. 6 to 10
- D. 11 to 15
- E. 16 or more

45. How many books are in your home?

- A. None or very few (0 - 10)
- B. A few books (11 - 25)
- C. One bookcase full (26 - 100)
- D. Two bookcases full (101 - 250)
- E. Three or four bookcases full (251 or more)

46. How many times have you changed schools since starting the 1st grade (not counting promotions from one school to another)?

- A. Never
- B. Once
- C. Twice
- D. Three times
- E. Four or more times

47. When was the last time you changed schools (not counting promotions from one school to another)?

- A. I have not changed schools
- B. About one year ago
- C. About two years ago
- D. About three years ago
- E. About four or more years ago

48. How old were you when you started the first grade?

- A. Less than 4½ years of age
- B. 4½ to (but not) 5
- C. 5 to (but not) 5½
- D. 5½ to (but not) 6
- E. 6 or older

49. Since you started the first grade, how many full semesters (half years) of school have you missed?

- A. None
- B. One semester
- C. Two semesters
- D. Three semesters
- E. Four semesters or more

50. How long have you lived in the community where you live now?

- A. One year or less
- B. More than 1 year, but not more than 3 years
- C. More than 3 years, but not more than 5 years
- D. More than 5 years, but not more than 10 years
- E. Ten years or more

51. How many different houses or apartments (not counting vacations away from your regular home) has your family lived in, in the last three years?

- A. One
- B. Two
- C. Three
- D. Four
- E. Five or more

52. Which one of the following best describes the building in which you live?

- A. A one-family house
- B. A two-family house
- C. A small apartment house (3 or 4 families)
- D. A large apartment house (5 families or more)
- E. A rooming house, hotel, or trailer

Items 53 to 61. How many books or magazines have you read in each of the following groups (not including those required for school) in the past 12 months? Mark your answers as follows:

A. None
B. One
C. Two
D. Three
E. Four or more

53. Western stories, adventure stories, or mystery stories
54. Science fiction books or magazines (not comic books)
55. Science - non-fiction
56. Plays, poetry, essays, literary criticism, or classics
57. Politics, world affairs, biography, autobiography, historical novels
58. Religious books or magazines
59. Comic books
60. Love stories
61. Fashion or etiquette

Items 62 to 71. How many of each of the following kinds of magazines do you get regularly at home (by subscription or purchased regularly)? Mark your answers as follows:

A. None
B. One
C. Two
D. Three
E. Four or more

62. Ladies' magazines, homemaking magazines, or fashion magazines (such as Ladies' Home Journal, McCall's, Redbook, Cosmopolitan, Better Homes and Gardens, Good Housekeeping, House Beautiful, etc.)
63. Men's magazines or sports magazines (such as Sports Afield, Sports Illustrated, Field and Stream, Esquire, Argosy, True, etc.)
64. Movie magazines, love stories, detective magazines
65. Mechanics, electronics, aviation, or automobile magazines (such as Popular Mechanics, Hot Rod, Motor Trend, etc.)
66. Farm magazines (such as Farm Journal, Progressive Farmer, Farm and Ranch, Prairie Farmer, Successful Farmer, etc.)
67. News or pictorial magazines (such as Life, Look, Newsweek, Time, U.S. News and World Report, etc.)
68. Business magazines (such as Business Week, Nation's Business, etc.)
69. Opinion magazines (such as The Nation, The New Republic, The Reporter, The Progressive, etc.)
70. Professional or trade journals or magazines
71. Science fiction magazines (such as Galaxy, Science Fiction, etc.)

Items 72 to 97. For the following statements indicate how often each one applies, or applied to you when you were in school. Please answer the questions sincerely. Your answers will not affect your grades in any way. Mark one of the following choices for each statement.

A. Almost always
B. Most of the time
C. About half of the time
D. Not very often
E. Almost never

72. I do a little more than teachers require.
73. I have a difficult time expressing myself in written reports, examinations, and assignments.
74. I consider myself to be a fast reader.
75. My grades reflect my ability fairly accurately.
76. I make sure that I understand what I am to do before I start an assignment.
77. I seem to accomplish very little compared to the amount of time I spend studying.
78. Lack of interest in my schoolwork makes it difficult for me to keep my attention on what I am doing.
79. I enjoy writing reports or compositions.
80. Failure to pay attention in class has caused my marks to be lowered.
81. I consider a very difficult assignment a challenge to my abilities.
82. I do my assignments so quickly that I don't do my best work.
83. I have missed assignments or other important things that the teacher has said because I was not paying attention.
84. My teachers have criticized me for turning in sloppy (poorly done) assignments.
85. Unless I really like a course, I do only enough to get by.
86. I have difficulty with the mechanics of English composition.
87. In class, I can't seem to keep my mind on what the teacher is saying.
88. When I get behind in my work there is no opportunity to catch up.
89. My grades on written examinations or reports have been lowered because of careless errors in spelling, grammar, or punctuation.
90. Slow reading holds me back in my school work.
91. I pronounce the words to myself as I am reading.
92. I feel that I am taking courses that will not help me much in an occupation after I leave school.
93. When studying for a test, I am able to pick out important points to learn.
94. I don't seem to be able to concentrate on what I read.
95. I keep up to date on my assignments by doing my work every day.
96. I have trouble remembering what I read.
97. I read material over and over again without really understanding what I have read.

Items 98 to 104. Starting with courses taken in the ninth grade, how many semesters (half-years) of the following kinds of courses have you taken? Include those which you may be taking now. Mark your answers as follows:

A. None
B. One
C. Two
D. Three or four
E. Five or more

98. Science courses (biology, chemistry, general science, physics, etc.)
99. Foreign languages (French, German, Spanish, Latin, etc.)
100. Social studies (history, civics, government, economics, etc.)
101. English courses (grammar, composition, literature, etc.)
102. Business or commercial courses (typing, bookkeeping, shorthand, business law, commercial arithmetic, etc.)
103. Vocational, shop, or agricultural courses
104. Mathematics courses (algebra, geometry, trigonometry, etc.) Do not count commercial arithmetic or shop mathematics.

Items 105 to 112. The following questions ask you to report your grades in courses you have taken in the ninth grade or later. Please consider only semester grades. If you have not taken any courses in the topic, skip the item. In these questions choose the one answer that best describes your grades from the following:

A. Mostly A's or equivalent
B. Mostly A's and B's or equivalent
C. Mostly B's and C's or equivalent
D. Mostly C's and D's or equivalent
E. Mostly D's or below or equivalent

If your school does not use letter grades, please use the following equivalents:

For a grade of A:	Excellent;	90-100
For a grade of B:	Good;	80-89
For a grade of C:	Average;	70-79
For a grade of D;	Fair;	60-69
For a grade below D:	Failing;	59 or lower

105. My grades in mathematics have been:
106. My grades in science courses have been:
107. My grades in foreign languages have been:
108. My grades in history and social studies courses have been:
109. My grades in English courses have been:
110. My grades in vocational courses have been:
111. My grades in business or commercial courses have been:
112. My grades in all courses starting with the ninth grade have been:

113. What is the greatest amount of education you expect to have during your life?

A. I don't expect to finish high school.
B. I expect to graduate from high school.
C. I expect to obtain vocational, business school, or junior college training.
D. I expect to graduate from a regular four-year college.
E. I expect to obtain a masters or doctoral degree.

114. If there were no other way for you to attend college, would you be willing to take out a loan which you would have to pay back after you graduate?

A. Yes
B. No

115. My parents want me to go into a particular kind of work.

A. Yes
B. No

116. How many electrically operated power tools (saw, drill, sander, etc.) are in your home?

A. None
B. One
C. Two
D. Three
E. Four or more

117. How many cars or station wagons does your family own? Do not include trucks. Include any owned by your parents, or brothers or sisters living in your home.

A. None
B. One
C. Two
D. Three
E. Four or more

118. What year model is your family's newest car or station wagon? Do not include trucks.

A. 1959 or older
B. 1960-61
C. 1962-63
D. 1964 or newer
E. My family does not own a car or station wagon.

119. Which one of the following best describes your usual health in the last 3 years?

A. Excellent
B. Very good
C. Average
D. Poor
E. Very poor

120. What is the longest period of time that you have ever been in bed for sickness or an accident?

A. Up to one week (one week or less)
B. Up to one month (from one week to one month)
C. Up to three months (from one month to three months)
D. Up to six months (from three months to six months)
E. More than six months

Items 121 to 150. For the following questions, mark your answers as follows:
A. Yes
B. No

121. Do you wear glasses all the time?
122. Do you have trouble seeing things from a distance?
123. Do you wear glasses for special purposes (reading, T.V.)?
124. Do you have trouble hearing people talk?
125. Are you hard of hearing?
126. Do you wear a hearing aid?
127. Are you able to speak clearly all of the time?
128. Is your speech easily understood?
129. Do you have more trouble with your skin than others your own age?
130. Do you have more trouble with the skin on your face than others your own age?
131. Have you ever been knocked unconscious?
132. Do you have normal use of both your legs?
133. Do you have normal use of both your arms?
134. Do you have normal use of both your hands?
135. Do you have frequent stomach trouble or indigestion?
136. Do you have trouble with your back or spine?
137. Have you ever worn a shoulder brace, corrective shoes, leg brace, or any other appliance?
138. Have you ever had mumps?
139. Have you ever had rheumatic fever?
140. Have you ever had asthma?
141. Have you ever had hay fever?
142. Has a doctor ever told you that you have an allergy?
143. Has a doctor ever told you that you have heart trouble?
144. Have you ever had infantile paralysis (polio)?
145. Have you had sore throats more than four times a year?
146. Have you ever had severely aching joints?
147. Do you often get severe headaches?
148. Have you ever had spells of dizziness and faintness?
149. Do you often get aches and pains even when you are not sick enough to see a doctor?
150. Do you catch colds very often?

Table B-1

SIB Items Significant at Three Levels of Confidence For Comparing Male Talent, Male Persisters, Male Dropouts, Female Talent, Female Persisters, Female Dropouts Married, and Female Dropouts Unmarried

Item Number	MT MP	MT MDO	FT FP	FT FDOM	FT FDOU	MP MDO	FP FDOM	FP FDOU
1	.001	.001	.05					.05
2		.001		.001			.01	
3	.01	.05	.01			.001	.05	.05
4	.01	.01	.01					
5							.05	
6			.05					
7		.001		.01	.05	.01		
8		.001	.05		.001			
9	.01	.001				.001		
10		.001		.01	.001	.001		
11		.05	.01			.05	.01	
12	.05	.05						.01
13		.05	.01	.001			.001	
14	.001	.01		.05		.001		
15		.01	.05					
16			.01		.05			
17*						.001	.01	
18*						.05	.01	
19*						.001	.05	
20*							.01	
21*						.01	.05	
22*								

*indicates items not in Project TALENT SIB

(Table continued on next page).

Item Number	MT MP	MT MDO	FT FP	FT FDOM	FT FDOU	MP MDO	FP FDOM	FP FDOU
23*						.01		
24*						.001		
25*						.01		
26*								.01
27*								
28		.001		.001		.001		
29	.05	.001	.01	.001	.001	.001		.05
30*								
31	.001	.01	.01	.01				
32	.01							
33	.001	.001	.01	.001	.001	.001		.05
34	.01				.001	.05		
35	.01		.05	.05	.01	.05		
36*							.05	
37*								
38	.01			.05		.01		
39	.01	.001	.01	.001	.01	.001	.001	
40	.01		.01				.05	
41		.001		.001		.001	.001	
42		.01	.01	.001	.001		.01	.01
43	.001	.001	.001				.01	.05
44	.05			.05			.05	
45		.001		.001		.001	.001	
46	.001			.05		.01		

(Table continued to next page).

Item Number	MT MP	MT MDO	FT FP	FT FDOM	FT FDOU	MP MDO	FP FDOM	FP FDOU
47	.001			.01	.001	.001		.001
48*								
49	.01	.001		.001	.001	.001	.01	.001
50				.001	.001		.001	.001
51	.01							
52		.001		.001	.01		.001	.05
53		.001						
54			.001	.01				
55								
56	.05	.001		.001			.001	
57	.01	.001		.001	.05			
58			.05		.01			
59	.05	.05				.01		
60	.05					.05		
61*						.05		
62	.001	.001	.05	.001	.001			
63		.001			.01	.01		
64		.01				.001		
65		.001	.01			.001		
66	.01			.01				
67							.05	
68	.01	.05						
69								
70	.001	.01						

(Table continued to next page).

Item Number	MT MP	MT MDO	FT FP	FT FDOM	FT FDOU	MP MDO	FP FDOM	FP FDOU
71								
72	.01	.001		.01		.001		
73	.01	.001		.05			.05	
74	.001	.05	.05	.05	.01	.001		
75	.001	.001	.05	.01	.001	.01		.001
76			.05					
77		.001				.001		
78	.001	.001		.001	.001	.001	.001	.001
79	.001	.001			.001		.01	.01
80	.01	.001		.01	.001	.001		.001
81	.05	.05		.05	.001			
82		.001	.05		.001	.001		
83		.001		.001	.001	.001		.01
84		.001			.001	.001		.01
85		.001		.001	.001	.001		.001
86		.001		.01	.01	.001	.05	.001
87		.001		.001	.001	.001	.01	.01
88*						.001		.001
89		.001		.05				.01
90		.01						
91		.05		.001				
92	.01	.001		.01		.001		
93	.05	.001			.05			
94*								

(Table continued to next page).

Item	MT	MT	FT	FT	FT	MP	FP	FP
Number	MP	MDO	FP	FDOM	FDOU	MDO	FDOM	FDOU
95	.05	.001	.001	.05	.001	.001		.001
96		.05						
97		.001				.001		
98	.05	.01	.001	.001				
99	.001	.001	.001	.001		.001		.05
100	.001	.001	.001	.001	.001			
101	.001	.001	.001	.001	.001			
102	.001	.001	.001	.001	.001	.01		
103	.001	.001			.01	.05		
104		.001	.001	.001	.05	.01		.01
105	.001	.001		.001	.001	.01		.001
106	.001	.001	.001	.001	.001	.001		.05
107	.001	.001	.001	.001	.001	.001		.001
108	.001	.001	.01	.001	.001	.001	.01	.001
109	.001	.001	.001	.001	.001	.001	.05	.001
110	.01	.001		.001	.001			
111	.001	.001	.001	.001	.001			
112	.001	.001	.001	.001	.001	.001		.001
113*						.001	.001	.001
114*						.001	.001	.05
115*								
116		.05	.05			.05		
117	.001	.001		.001	.001	.001		
118	.01	.001	.001	.001	.05			

(Table continued to next page).

Item Number	MT MP	MT MDO	FT FP	FT FDOM	FT FDOU	MP MDO	FP FDOM	FP FDOU
119	.001	.001	.01	.001	.001	.01		.001
120		.001			.01	.01		.01
121		.05				.001		
122		.01		.01		.001	.001	
123		.01				.05		
124		.05						
125								
126								
127	.05							
128								
129								
130								
131		.01			.001	.01		
132								
133	.05							
134	.05							
135	.05					.01		
136		.001						
137								
138			.05					
139					.01			.05
140								
141				.01				
142					.01			.01

(Table continued to next page).

Item Number	MT MP	MT MDO	FT FP	FT FDOM	FT FDOU	MP MPO	FP FDOM	FP FDOU
143	.05							
144	.001	.001			.01			
145		.05			.05			.05
146		.01						
147		.001			.05			.05
148		.001			.05			.05
149	.001	.001	.05		.05			.001
150					.001			.05

Appendix C

Student Information Blank Part II and responses to items 151-160 expressed in per cent for dropouts and persisters

STUDENT INFORMATION BLANK
PART II

Items 151 to 160. The questions in this part are similar to those in some of the earlier parts. Answer each question sincerely and thoughtfully. Each question should have one answer and only one answer. Now, go ahead and answer the questions by drawing a circle around the letter which indicates your answer.

151. Which one of the following comes closest to describing the work of your father (or the male head of your household)? Mark only one answer. If he works on more than one job, mark the one on which he spends most of his time. If he is now out of work, or if he's retired, mark the one that he did last.

A. Farm or ranch owner and/or manager
B. Farm or ranch foreman
C. Farm or ranch worker
D. Workman or laborer -- such as a factory or mine worker, fisherman, filling station attendant, longshoreman, etc.
E. Private household worker -- such as a servant, butler, etc.
F. Protective worker -- such as a policeman, detective, sheriff, fireman
G. Service worker -- such as barber, beautician, waiter, etc.
H. Semi-skilled worker -- such as factory machine operator, bus or cab driver, meat cutter, etc.
I. Skilled worker or foreman -- such as a baker, carpenter, electrician, enlisted man in the armed forces, mechanic, plumber, plasterer, tailor, foreman in a factory or mine (but not on a farm), etc.
J. Clerical worker -- such as bank teller, bookkeeper, sales clerk, office clerk, mail carrier, messenger, etc.
K. Salesman -- such as real estate or insurance salesman, factory representative, etc.
L. Manager -- such as sales manager, store manager, office manager, business manager, factory supervisor, etc.
M. Official -- such as manufacturer, officer in a large company, banker, government official or inspector, etc.
N. Proprietor or owner -- such as owner of a small business, wholesaler, retailer, contractor, restaurant owner, etc.

151.	MT	FT	MDO	MP	FP	FDM	FDU
A	7	4	2	1	0	0	0
B	0	0	0	0	0	0	0
C	1	1	0	1	0	0	4
D	9	11	16	16	20	20	8
E	0	0	0	0	0	0	4
F	2	1	3	3	1	2	8
G	1	1	1	1	0	0	4
[illegible]	7	7	18	17	15	9	15
I	16	20	24	22	26	33	12
J	3	4	6	6	4	9	4
K	7	7	6	10	6	4	8
L	12	10	3	9	1	11	8
M	5	4	4	2	2	0	0
N	12	11	6	2	7	5	4
O	12	13	4	6	9	0	0
P	5	5	3	2	2	5	8
Q	3	4	3	2	1	0	12
other or no answer			2	1	5	1	1

152.

A	55	50	45	40	43	47	42
B	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0
D	2	3	6	2	5	4	4
E	1	1	3	1	4	5	4
F	0	0	1	0	0	0	0
G	3	3	8	6	7	4	8
H	4	4	6	17	11	16	12
I	1	2	2	0	3	0	4
J	18	19	16	22	11	16	12
K	2	2	3	1	3	0	0
L	1	2	0	2	3	2	0
M	0	0	1	0	2	0	0
N	2	1	2	2	0	0	0
O	7	10	7	5	3	4	4
P	1	7	1	0	3	0	0
Q	3	2	0	0	2	2	0

O. Professional -- such as actor, accountant, artist, clergyman, dentist, engineer, lawyer, librarian, scientist, etc.
P. Technical -- such as draftsman, surveyor, medical or dental technician etc.
Q. I don't know.

152. Which one of the following comes closest to describing the work of your mother (or the female head of your household)? Mark only one answer. If she does housework in addition to outside work, count only the outside work. If she works on more than one job, mark the most important one. If she usually works, but is now out of work, mark the one that she did last.

A. Housewife only: she has not worked for pay in the last three years.
B. Farm or ranch owner and/or manager
C. Farm or ranch worker
D. Worker or laborer -- such as charwoman, laundry worker, etc.
E. Private household worker -- such as housekeeper, maid, laundress, etc.
F. Protective worker -- such as policewoman, etc.
G. Service worker -- such as beautician, waitress, etc.
H. Semi-skilled worker -- such as factory machine operator, cab driver, etc.
I. Skilled worker or forewoman -- such as baker, inspector, etc.
J. Clerical worker -- such as bookkeeper, secretary, typist, sales clerk, store clerk, etc.
K. Sales -- such as real estate, life insurance, etc.
L. Manager -- such as sales manager, store manager, office manager, business manager, factory supervisor, etc.
M. Official -- such as manufacturer, officer in a large company, banker, government official or inspector, etc.
N. Proprietor or owner -- such as owner of a small business, wholesaler, retailer, restaurant owner, etc.
O. Professional -- such as actress, accountant, artist, dentist, physician, engineer, lawyer, librarian, scientist, etc.
P. Technical -- such as draftsman, medical or dental technician, etc.
Q. I don't know.

153. Mark the one answer indicating the highest level of education your father reached. Mark the one best answer even if you are not sure.

A. None, or some grade school
B. Completed sixth grade
C. Some junior high school, but did not graduate
D. Graduated from 9th grade
E. Some high school, but did not graduate
F. Graduated from high school
G. Vocational or business school after high school
H. Some junior or regular college, but did not graduate
I. Graduated from a regular 4-year college
J. Master's degree
K. Some work toward doctorate or professional degree
L. Completed doctorate or professional degree
M. I don't know

154. Mark the one answer indicating the highest level of education your mother reached. Mark the one best answer even if you are not sure.

A. None, or some grade school
B. Completed sixth grade
C. Some junior high school, but did not graduate
D. Graduated from 9th grade
E. Some high school, but did not graduate
F. Graduated from high school
G. Vocational or business school after high school
H. Some junior or regular college, but did not graduate
I. Graduated from a regular 4-year college
J. Master's degree
K. Some work toward doctorate or professional degree
L. Completed doctorate or professional degree
M. I don't know

155. What do you expect to do about military service

A. Never serve because I am a girl
B. Quit high school and enlist
C. Enlist right after high school
D. Work for a commission through a college ROTC program, military school, or one of the service academies
E. Enlist after I have completed some college training
F. Enlist after I have graduated from college

153.	MT	FT	MP	FP	MDO	FDM	FDU
A	3	3	1	1	5	4	0
B	3	4	1	1	4	2	4
C	N/A	N/A	17	12	18	9	12
D	N/A	N/A	5	5	3	5	0
E	10	10	19	22	21	20	35
F	13	19	30	26	26	35	15
G	24	23	6	14	5	13	8
H	8	8	7	5	7	7	12
I	16	12	5	4	2	0	0
J	14	9	2	1	1	0	4
K	5	3	1	1	3	0	0
L	1	2	2	1	0	2	4
M	5	7	4	4	3	4	8

154.

A	2	2	2	0	0	2	0
B	2	3	1	2	3	4	0
C	N/A	N/A	8	6	11	9	4
D	N/A	N/A	3	4	6	0	4
E	7	7	18	17	23	33	35
F	11	18	47	41	40	35	23
G	38	34	6	16	3	11	15
H	12	14	4	4	3	5	4
I	11	9	6	3	3	0	0
J	14	9	0	0	2	0	0
K	2	2	1	1	0	0	0
L	1	1	2	1	1	0	0
M	0	2	1	3	6	2	8

155.	MT	MP	MDO
A	5	0	0
B	0	0	9
C	5	14	3
D	28	11	0
E	3	5	2
F	14	15	0
G	2	3	12
H	3	3	4
I	10	13	27
J	3	3	13
K	5	5	10
L	22	28	16
no response	N/A	0	4

156.

A	5	7	14
B	12	3	12
C	26	18	30
D	26	24	11
E	22	18	15
F	4	18	11
G	2	3	2
H	3	3	2
I	1	1	2
J	1	1	0
K	0	3	0
L	1	1	1

G. Enlist after I have worked for several years
H. Enlist in the Reserves or National Guard
I. Wait until I am drafted
J. Never serve because I do not think I can pass the physical examination
K. Never serve for other reasons
L. I have no idea what I will do about military service

156. In which branch of the service do you expect to serve?

A. I do not expect to serve, for physical reasons.
B. I do not expect to serve, for reasons other than physical
C. Army
D. Air Force
E. Navy
F. Marine Corps
G. Coast Guard
H. Army Reserves or National Guard
I. Air Force Reserves or National Guard
J. Navy Reserves
K. Marine Corps Reserves
L. Coast Guard Reserves

157. If all your plans work out as they should, how much money (per year) would you expect to be earning twenty years from now?

A. $2,500 or less
B. $2,500 to $5,000
C. $5,000 to $7,500
D. $7,500 to $10,000
E. $10,000 to $12,500
F. $12,500 to $15,000
G. $15,000 to $17,500
H. $17,500 to $20,000
I. $20,000 to $22,500
J. $22,500 to $25,000
K. $25,000 or more

157.

	MT	FT	MP	FP	MDO	FDM	FDU
A	3	2	0	2	1	15	8
B	2	13	0	10	2	27	19
C	8	14	9	35	19	18	12
D	19	27	18	28	19	15	15
E	16	21	21	14	17	5	15
F	16	9	16	4	13	9	12
G	9	6	10	4	7	0	0
H	4	3	10	0	4	4	0
I	2	2	4	1	4	0	0
J	13	2	6	1	6	0	4
K	13	1	8	1	10	0	12

158.

A	5	1	0	1	2	24	15
B	6	18	6	30	11	31	23
C	21	26	24	31	29	13	19
D	27	27	29	27	18	13	12
E	18	14	16	5	17	5	15
F	7	6	8	0	6	4	0
G	5	3	6	1	3	4	4
H	2	2	4	0	3	0	4
I	2	1	6	1	6	0	4
J	2	1	0	1	1	0	0
K	5	1	3	4	0	4	0

158. How much money is the least amount of earnings (per year) that would satisfy you in the twentieth year from now?

A. $2,500 or less
B. $2,500 to $5,000
C. $5,000 to $7,500
D. $7,500 to $10,000
E. $10,000 to $12,500
F. $12,500 to $15,000
G. $15,000 to $17,500
H. $17,500 to $20,000
I. $20,000 to $22,500
J. $22,500 to $25,000
K. $25,000 or more

159. Do you plan to start college?

A. I don't plan to go to college.
B. I plan to start college right after high school.
C. I plan to start college after completing military service.
D. I plan to start college after I have worked for a few years.
E. I may go to college sometime in the future, but my plans are not definite.

160. In the following list of occupations, mark the occupation you expect to make your career. If your choice is not on the list, mark the one that is closest to it. Mark one of these even if you have not made up your mind.

Section A MALES ONLY

A. Farm or ranch owner and/or manager
B. Farm or ranch foreman
C. Farm or ranch worker
D. Workman or laborer -- such as factory or mine worker, fisherman, filling station attendant, longshoreman, etc.
E. Private household worker -- such as a servant, butler, etc.
F. Protective worker -- such as a policeman, detective, sheriff, fireman
G. Service worker -- such as barber, beautician, waiter, etc.

H. Semi-skilled worker -- such as factory machine operator, bus or cab driver, meat cutter, etc.
I. Skilled worker or foreman -- such as a baker, carpenter, electrician, enlisted man in the armed forces, mechanic, plumber, plasterer, tailor, foreman in a factory or mine (but not on a farm), etc.
J. Clerical worker -- such as bank teller, bookkeeper, sales clerk, officer clerk, mail carrier, messenger, etc.
K. Salesman -- such as real estate or insurance salesman, factory representative, etc.
L. Manager -- such as sales manager, store manager, office manager, business manager, factory supervisor, etc.
M. Official -- such as manufacturer, officer in a large company, banker, government official or inspector, etc.
N. Proprietor or owner -- such as owner of a small business, wholesaler, retailer, contractor, restaurant owner, etc.
O. Professional -- such as actor, accountant, artist, clergyman, dentist, engineer, lawyer, librarian, scientist, etc.
P. Technical -- such as draftsman, surveyor, medical or dental technician, etc.

Section B FEMALES ONLY

A. Housewife
B. Farm or ranch owner and/or manager
C. Farm or ranch worker
D. Worker or laborer -- such as charwoman, laundry worker, etc.
E. Private household worker -- such as housekeeper, maid, laundress, etc.
F. Protective worker -- such as policewoman, etc.
G. Service worker -- such as beautician, waitress, etc.
H. Semi-skilled worker -- such as factory machine operator, cab driver, etc.
I. Skilled worker or foreman -- such as baker, inspector, etc.
J. Clerical worker -- such as bookkeeper, secretary, typist, sales clerk, store clerk, etc.
K. Sales -- such as real estate, life insurance, etc.
L. Manager -- such as sales manager, store manager, office manager, business manager, factory supervisor, etc.

M. Official -- such as manufacturer, officer in a large company, banker, government official or inspector, etc.
N. Proprietor or owner -- such as owner of a small business, wholesaler, retailer, restaurant owner, etc.
O. Professional -- such as actress, accountant, artist, dentist, physician, engineer, lawyer, librarian, scientist, etc.
P. Technical -- such as draftsman, medical or dental technician, etc.

161. Are you presently employed?

A. Full time (35 hours or more per week)
B. Part time (less than 35 hours per week)
C. Not presently employed

If you circled A or B, please answer questions 162 and 163.

162. What is the job called?

____

163. Tell what you do on the job. Please be specific.

____

____

____

159.	MT	FT	MP	FP	MDO	FDM	FDU
A	8	24	15	32	60	73	65
B	80	69	60	51	5	5	15
C	4	0	4	0	4	0	0
D	2	2	3	6	9	2	0
E	5	5	18	11	22	20	19
160.							
A			0	7	2	49	19
B			0	0	0	0	0
C			0	0	0	0	0
D			2	0	2	0	0
E			0	0	0	0	0
F			2	0	2	0	0
G			1	3	1	9	15
H			0	1	7	2	8
I			20	0	43	0	4
J			3	30	2	15	12
K			1	0	1	0	0
L			3	0	8	4	0
M			3	0	2	2	0
N			0	0	7	2	4
O			59	56	22	15	35
P			7	3	3	4	4

Appendix D

Attitude Inventory for Youth

In Table D-1 on page D-13 are the dropouts' and persisters' perceptions of the way they are perceived by parents and friends. The numbers in the table represent the per cent of each group responding to each item.

Attitude Inventory for Youth

by

J. L. French and B. W. Cardon
The Pennsylvania State University

In this section there are a number of statements dealing with planning. After reading each statement, you are to decide what viewpoint you hold. Do not argue with yourself about a statement. Answer quickly and frankly.

By means of the scale below, try to show the strength of your feelings toward each statement by drawing a circle around:

A, if you strongly agree with the statement,
a, if you agree but not strongly so,
N, if you are neutral or undecided,
d, if you disagree but not strongly so, or
D, if you strongly disagree with the statement.

Remember, the only correct answer is the one which actually represents how you feel about planning. **PLEASE RESPOND TO EVERY ITEM.** You may want to write notes in the margin about some items. Please do so as often as you like, but mark an answer in the appropriate space for every item.

1. With the world as it is you can't plan very far ahead................................... A a N d D
2. One never knows what will happen from one day to the next............................. A a N d D
3. Marriage should be planned at least six months in advance............................ A a N d D
4. Ideally, families should be planned at least a year in advance...................... A a N d D
5. Major job changes should be planned at least three months in advance...................... A a N d D
6. When possible, major purchases such as a home should be planned a year in advance.......... A a N d D
7. The future is out of my hands................ A a N d D
8. I just take whatever comes along............. A a N d D
9. It is more important for men than women to plan for the future.......................... A a N d D

10. I can only try to shape my future........... A a N d D

11. When I plan ahead things usually turn out better.................................... A a N d D

12. When I plan ahead I am more likely to get there..................................... A a N d D

13. I seldom plan ahead........................ A a N d D

14. Planning ahead just leads to disappointments A a N d D

15. Planning for the future is more difficult than it was 25 years ago................... A a N d D

16. My future depends on how hard I try......... A a N d D

Attitude Concerning Schools and Teachers

In this section there are a number of statements dealing with schools and teachers. After reading each statement you are to decide what viewpoint you hold. Do not argue with yourself about a statement. Answer quickly and frankly.

By means of the scale below, try to show the strength of your feeling toward each statement by drawing a circle around:

A, if you strongly agree with the statement,
a, if you agree but not strongly so,
N, if you are neutral or undecided,
d, if you disagree but not strongly so, or
D, if you strongly disagree with the statement.

Remember, the only correct answer is the one which actually represents how you feel about schools and teachers. PLEASE RESPOND TO EVERY ITEM.

1. My parents feel school is very important..... A a N d D

2. My parents think everyone should graduate from high school............................ A a N d D

3. My parents are not satisfied with the school system.............................. A a N d D

4. My parents think a lot of time is wasted in school..................................... A a N d D

5. My parents believe that "schooling" is up to me... A a N d D

Attitudes Concerning Schools and Teachers (continued)

6. My parents think I should study more......... A a N d D
7. My parents think I should place more value on school................................... A a N d D
8. Most of my teachers are (were) good ones..... A a N d D
9. Class work in school is too easy............. A a N d D
10. The amount of my education is up to me....... A a N d D
11. Being with friends is the most important part of school............................. A a N d D
12. It is easy to enroll in good courses in school...................................... A a N d D
13. Most teachers are cold....................... A a N d D
14. At school things are in a big rush........... A a N d D
15. There is nothing for me in school............ A a N d D
16. School people do the best they can........... A a N d D
17. My high school emphasizes college too much... A a N d D
18. School people hold students down too much.... A a N d D
19. There are too few subjects for kids to take in school.............................. A a N d D
20. School should include longer periods of recreation.................................. A a N d D
21. I am (was) satisfied with my school work..... A a N d D
22. Class periods should be shorter.............. A a N d D
23. I like school................................ A a N d D
24. Most courses in school are worthwhile........ A a N d D
25. Most teachers are out to get you............. A a N d D
26. Most courses provide something I need........ A a N d D
27. Teachers need to take more interest in their students.............................. A a N d D
28. School people use punishment too often....... A a N d D
29. We need more teachers........................ A a N d D
30. Teachers should try harder to understand students.................................... A a N d D

Attitudes Concerning Schools and Teachers (continued)

31. Some teachers should take their time and not go so fast............................ A a N d D

32. Students should try harder when they are in school.................................... A a N d D

33. Teachers seldom listen to students........... A a N d D

34. Schools are changing for the better.......... A a N d D

35. Most school courses are too easy............. A a N d D

36. Counselors should listen more to students.... A a N d D

37. School administrators are fair............... A a N d D

38. I can think of nothing to add to schools..... A a N d D

39. Students need more freedom in arranging classes................................... A a N d D

40. Teachers try to make it hard for you......... A a N d D

41. I respect most of my teachers................ A a N d D

42. Most teachers are well prepared for teaching. A a N d D

43. The curriculum is well planned............... A a N d D

44. People look down on those who do not graduate from high school........................... A a N d D

45. It is hard to find a job if you do not graduate from high school................... A a N d D

46. School records are often incorrect........... A a N d D

47. Schools have too much red tape............... A a N d D

48. Teachers play favorites too often............ A a N d D

49. Teachers should be more carefully screened... A a N d D

50. Teachers should have more class discussion... A a N d D

51. Most teachers don't do enough real teaching.. A a N d D

52. Teachers waste time in class................. A a N d D

53. Schools do not have enough supplies (books, etc.)................................ A a N d D

54. Schools should adapt more to individual needs A a N d D

55. Teachers are too lenient..................... A a N d D

56. Social units and clubs are hard to join...... A a N d D

Attitudes Concerning Schools and Teachers (continued)

57. Standards are too high in school............. A a N d D
58. My school doesn't prepare students for the real world................................. A a N d D
59. Schools are too crowded...................... A a N d D
60. Most students aren't interested in school.... A a N d D
61. There should be more ability grouping........ A a N d D
62. There are too many social activities for my age group.................................. A a N d D
63. Students need more counseling................ A a N d D
64. School is a bore............................. A a N d D
65. Home is more of a problem than school........ A a N d D
66. Teachers usually understand students' problems..................................... A a N d D
67. Most teachers know their subjects well....... A a N d D
68. Most teachers encourage students to think.... A a N d D
69. There is not enough contact between teachers and students............................... A a N d D

For each of the sentences below indicate how much of the time the statement is like you by writing a number in the blank as follows:

1, if it is like you most of the time,
2, if it is like you a good deal of the time,
3, if it is like you about half of the time,
4, if it is occasionally like you, or
5, if it is seldom like you.

___ I am a pretty quiet person
___ I am a reliable person
___ I am very bold
___ I like to be the center attraction
___ I am fair
___ I am shy
___ I am talkative
___ I am even tempered
___ I am short tempered
___ I am thoughtless of others
___ I am friendless
___ I am difficult to get along with
___ I am friendly
___ I am easy to get along with
___ I am helpful to my friends
___ I am impatient
___ I am reverent
___ I am softhearted
___ I am troubled by family problems
___ I hurt people who try to help me
___ I am moody
___ I like to be with others
___ I am intelligent
___ I am cautious

___ I am apathetic
___ I am brave
___ I am gloomy
___ I am confident
___ I am stubborn
___ I am logical
___ I am a good team worker
___ I am ambitious
___ I am serious minded
___ I am happy go lucky
___ I am a hard worker
___ I am afraid to meet new people
___ I am accepted
___ I am thrifty
___ I am cheerful
___ I am flexible
___ I am erratic
___ I have clever ideas
___ I am clear thinking
___ I am unconventional
___ I am persistent
___ I am conscientious
___ I am assertive
___ I am a complicated person

Read each of the endings below and place a check (✓) before the endings that would very appropriately end the sentence.
"Most of the time my parents think I am..."

___ a good worker ___
___ a funny person ___
___ about average ___
___ artistic ___
___ autocratic ___
___ capable of doing better ___
___ careless ___
___ confident ___
___ conscientious ___
___ contented ___
___ demanding ___
___ easy going ___
___ enterprising ___
___ enthusiastic ___
___ gloomy ___
___ good ___
___ good natured ___
___ attractive ___
___ happy go lucky ___
___ hard headed ___
___ hard to get along with ___
___ healthy ___
___ humorous ___
___ imaginative ___
___ ingenious ___
___ irritable ___
___ lazy ___
___ one who grew up too fast ___

___ loyal ___
___ mixed up ___
___ moody ___
___ original ___
___ persistent ___
___ poised ___
___ quiet ___
___ rowdy ___
___ rude ___
___ self centered ___
___ show off ___
___ sincere ___
___ slow ___
___ sly ___
___ stable ___
___ stubborn ___
___ spineless ___
___ stingy ___
___ thankless ___
___ trying ___
___ unambitious ___
___ undependable ___
___ unfriendly ___
___ unintelligent ___
___ wise ___
___ sarcastic ___
___ social climber ___

Now place an "X" after each of the endings above that appropriately end the sentence "My friends think I am..."

Attitudes Concerning Personal Traits

By means of the scale below, try to show the strength of your feeling toward each of the traits or characteristics by drawing a circle around:

A, if you very much admire people possessing the trait,
a, if you somewhat admire people possessing the trait,
N, if you neither admire nor dislike people possessing the trait,
d, if you somewhat dislike people possessing the trait, or
D, if you very much dislike people possessing the trait.

Remember, the only correct answer is the one which actually represents how you feel about the traits or characteristics. PLEASE RESPOND TO EVERY ITEM.

1. Have self confidence..................... A a N d D
2. Are leaders............................. A a N d D
3. Can organize things..................... A a N d D
4. Can reach their goals................... A a N d D
5. Understand people....................... A a N d D
6. Are very calm........................... A a N d D
7. Can get along with people............... A a N d D
8. Are pleasant............................ A a N d D
9. Are intelligent......................... A a N d D
10. Get by with little effort............... A a N d D
11. Are extremely ambitious................. A a N d D
12. Think before they act .... A a N d D
13. Are independent......................... A a N d D
14. Are educated............................ A a N d D
15. Are honest.............................. A a N d D
16. Are good looking........................ A a N d D
17. Are unselfish........................... A a N d D
18. Have money.............................. A a N d D
19. Value their parents..................... A a N d D
20. Are married............................. A a N d D

Attitudes Concerning Personal Traits (continued)

21. Have initiative....................... A a N d D
22. Stick to the job...................... A a N d D
23. Have a decent job..................... A a N d D
24. Have a lot of money................... A a N d D
25. Are responsible....................... A a N d D
26. Have peace of mind.................... A a N d D
27. Make good without college............. A a N d D
28. Can work with others.................. A a N d D
29. Value their country................... A a N d D
30. Are happy with the job they are doing.. A a N d D
31. Share their belongings with others..... A a N d D
32. Maintain the highest moral standards... A a N d D
33. Do not have to follow orders........... A a N d D
34. Get the most out of others............. A a N d D
35. Really are interested in the well being of others..................... A a N d D
36. Follow rules and regulations closely... A a N d D
37. Are free to do as they chose........... A a N d D
38. Finish their education................. A a N d D
39. Value their friends.................... A a N d D
40. Can do as they want.................... A a N d D
41. Are happily married.................... A a N d D
42. Have religion.......................... A a N d D
43. Have a lot of real friends............. A a N d D
44. Finish a job once it's started......... A a N d D
45. Are interested in things around them... A a N d D
46. Can make friends with most people...... A a N d D
47. Have a car of their own................ A a N d D
48. Know how to get the best of every deal. A a N d D

Now, from the items number 1 to 48 on this and the preceding page, circle the five traits which you admire most in other individuals.

Goals

In considering the following goals draw a circle around the symbol(s) which represent your own reaction, a follows:

VI if you feel it is very important,
I if you feel it is important,
? if you do not know about its importance,
U if you feel it is unimportant, or
VU if you feel it is very unimportant.

PLEASE RESPOND TO EVERY ITEM. Remember the only correct answer is the one which actually represents your belief.

1. Have a happy marriage................ VI I ? U VU
2. Earn a good income................... VI I ? U VU
3. Receive a good education............. VI I ? U VU
4. Get a good job....................... VI I ? U VU
5. Direct activities of others.......... VI I ? U VU
6. Be an individual..................... VI I ? U VU
7. Enjoy family life.................... VI I ? U VU
8. Be a leader.......................... VI I ? U VU
9. Associate with well known people..... VI I ? U VU
10. Have a feeling of well being......... VI I ? U VU
11. Enjoy good health.................... VI I ? U VU
12. Enjoy my fellow workers.............. VI I ? U VU
13. Be religious......................... VI I ? U VU
14. Have plenty of money................. VI I ? U VU
15. Be happy............................. VI I ? U VU
16. Have a lot of friends................ VI I ? U VU
17. Raise a good family.................. VI I ? U VU
18. Accomplish something in my job....... VI I ? U VU
19. Be a good citizen.................... VI I ? U VU
20. Be respected by others............... VI I ? U VU
21. Have a new car....................... VI I ? U VU
22. Have money in the bank............... VI I ? U VU
23. Have a lot of wisdom................. VI I ? U VU

Goals (continued)

24. Know myself.......................... VI I ? U VU
25. Be well liked........................ VI I ? U VU
26. Go to college........................ VI I ? U VU
27. Own a business....................... VI I ? U VU
28. Develop new ideas or things.......... VI I ? U VU
29. Help other people.................... VI I ? U VU
30. Help myself.......................... VI I ? U VU
31. Go to a technical school............. VI I ? U VU
32. Live in a fine house................. VI I ? U VU
33. Be a person of great influence....... VI I ? U VU
34. Be a good parent..................... VI I ? U VU

"Most of the time my parents think I am..."						"My friends think I am..."				
MD	MP	FDO	FDU	FP		MD	MP	FDO	FDU	FP
44	69	56	62	69	a good worker	48	58	48	42	69
22	29	22	39	30	a funny person	46	58	44	50	48
46	49	59	46	43	about average	43	43	54	39	40
21	15	31	42	32	artistic	16	14	26	27	21
6	11	2	4	6	autocratic	3	10	2	0	1
62	84	65	73	65	capable of doing better	29	36	20	39	15
36	28	17	35	20	careless	14	13	2	12	5
30	42	26	54	48	confident	46	53	37	50	46
28	41	43	58	52	conscientious	26	40	39	42	47
14	27	26	19	33	contented	25	22	28	27	20
30	30	15	19	20	demanding	21	17	6	15	6
46	56	39	62	40	easy going	55	61	65	62	53
16	37	13	23	27	enterprising	18	20	6	12	21
32	46	26	46	47	enthusiastic	39	50	33	46	51
18	7	5	4	6	gloomy	9	7	2	4	3
29	63	41	42	59	good	34	55	32	31	53

"Most of the time my parents think I am..."						"My friends think I am..."				
MD 50	MP 60	FDO 48	FDU 69	FP 53		MD 62	MP 62	FDO 76	FDU 58	FP 67
					good natured					
37	39	43	50	43	attractive	39	36	46	46	33
27	29	24	35	20	happy go lucky	45	38	30	42	31
48	42	30	27	25	hard headed	32	18	15	19	3
20	10	7	7	9	hard to get along with	7	2	4	15	1
57	86	57	62	61	healthy	56	74	39	39	61
35	52	41	58	51	humorous	50	57	41	54	57
39	44	39	65	48	imaginative	43	45	33	50	51
21	22	7	23	35	ingenious	24	23	6	15	25
21	17	19	19	10	irritable	9	6	4	12	4
25	34	13	31	25	lazy	9	13	6	15	3
39	14	52	39	10	one who grew up too fast	11	6	9	31	4
34	62	50	62	73	loyal	54	77	69	69	86
32	22	41	15	23	mixed up	22	14	13	27	15
26	30	19	31	25	moody	24	22	17	19	16
34	24	26	54	42	original	38	40	26	54	48
41	48	41	35	52	persistent	38	38	30	27	43
13	22	28	42	40	poised	16	22	33	50	37
18	36	35	23	39	quiet	24	30	24	27	32

"Most of the time my parents think I am..."						"My friends think I am..."				
MD	MP	FDO	FDU	FP		MD	MP	FDO	FDU	FP
21	9	9	12	4	rowdy	14	10	6	15	9
13	9	2	4	1	rude	5	6	4	0	0
16	14	19	12	5	self centered	14	13	7	8	5
20	6	7	0	5	show off	13	10	9	4	3
32	59	54	58	64	sincere	37	54	63	73	65
5	4	9	0	6	slow	3	4	2	4	4
18	14	19	19	7	sly	16	8	7	19	5
20	41	39	31	52	stable	28	30	32	35	48
43	42	32	39	35	stubborn	31	27	32	23	30
2	1	4	0	1	spineless	1	1	0	0	3
6	10	4	4	3	stingy	5	2	0	0	1
16	3	2	12	6	thankless	3	1	4	0	0
30	26	30	27	35	trying	25	22	13	19	28
14	6	7	15	3	unambitious	5	2	37	12	0
12	4	9	4	4	undependable	2	2	2	4	0
5	1	2	0	3	unfriendly	0	1	2	8	0
2	2	2	4	0	unintelligent	4	2	0	0	0
27	34	24	35	33	wise	28	40	20	39	32
22	17	19	23	19	sarcastic	17	23	11	23	10
14	16	11	27	19	social climber	17	17	7	27	14

Appendix E

MVII Dropout Keys

MVII Dropout Plus Key

Question Number	% of Diff.	Like	Dislike	Item content
23a				Set type for small newspaper
b				Inspect clothing for damage and flaws
c	24%		X	Plan menus
34a				Operate a precision lathe
b	20%	X		Overhaul an automobile engine
c	30%		X	Make a chemical analysis of a new toothpaste
36a				Be an interpreter of a foreign language
b				Be a railway conductor
c	27%	X		Be a welder
41a	41%	X		Be a master mechanic
b				Be a chemist
c				Be a recreation director
42a	32%		X	Fill prescription in a drugstore
b				Operate an addressing machine
c				Operate a printing press
47a				Read gas meters
b				Put tags and labels on merchandise
c	22%	X		Locate and replace shorted wires
48a				Study carpentry
b				Study first aid
c	25%	X		Study welding
50a				Be a fingerprint expert
b	30%		X	Be a weather forecaster
c	22%	X		Be an efficiency expert who improves shop procedures

MVII Dropout Plus Key (continued)

Question Number	% of Diff.	Like	Dislike	Item content
57a				Repair torn clothing
b				Wash and polish an automobile
c	23%	X		Adjust a carburetor
63a				Sell chemical supplies
b	22%	X		Be a telephone lineman
c				Be an office worker
67a				Take care of plants in garden
b				Paint watercolors
c	22%	X		Help someone with his income tax
72a	22%		X	Repair damage to a tree after a storm
b				Construct a cabinet according to a blueprint
c				Install an electric buzzer system
77a				Write daily reports on the progress of a charity drive
b				Make charts for use by ship companies or airlines
c	20%	X		Help select equipment for a machine shop
90a	21%		X	Be a hospital attendant
b				Be a bank teller
c	27%	X		Be a toolmaker
95a	20%	X		Get a job in a factory
b				Get a job in a retail store
c				Go to school

MVII Dropout Plus Key(continued)

Question Number	% of Diff.	Like	Dislike	Item content
98a				Take a machine apart to see how it works
b	23%		X	Assist a doctor at the scene of an accident
c				Teach someone how to use a machine
99a	31%	X		Play poker
b				Play basketball
c				Play checkers
107a	24%		X	Work behind a soda fountain
b				Type letters from a dictation machine
c				Check supplies received against a list of those ordered
113a	25%	X		Talk with an expert on engine design
b				Talk with a well-known newspaper writer
c				Talk with a prominent doctor about his medical practice
114a				Read about social customs in different countries
b	21%	X		Read a book about electronics design
c				Read about the discovery of a new pain-killing drug
125a	25%	X		Supervise men working on an assembly line
b				Keep records for a doctor's office
c				Build boats

MVII Dropout Plus Key(continued)

Question Number	% of Diff.	Like	Dislike	Item content
129a				Decode messages written in code
b				Do blood chemistry in medical laboratory
c	30%	X		Assist in research on automobile design
131a	22%	X		Be a draftsman
b				Be a chef
c				Be a physical therapist
132a				Study sheet metal pattern drafting
b				Study machine computation
c	28%		X	Study physiology (how the body works)
136a				Make a statistical study for a business concern
b	21%	X		Write an article on how machine tools are made
c				Do research on the cause of cancer
147a				Give the ether during an emergency operation
b	21%	X		Work out new uses for old machine parts
c				Keep accounts of money
158a				Be publicity director for a large company
b				Be a druggist
c	20%	X		Be a jeweler

MVII Dropout Minus Key (continued)

Question Number	% of Diff.	Like	Dislike	Item Content
24a	21%	X		Work on developing synthetic rubber
b	21%		X	Inspect machines to see if they are in good condition
c				Put together the parts on a calculating machine
33a	24%	X		Take a course in biology
b				Take a course in cost accounting
c				Take a course in engine design
34a				Operate a precision lathe
b				Overhaul an automobile engine
c	24%	X		Make a chemical analysis of a new toothpaste
41a	23%		X	Be a master mechanic
b	22%	X		Be a chemist
c				Be a recreation director
44a				Install an electric light bulb socket
b				Look for errors in the draft of a report
c	22%	X		Test water to see if it is pure
45a	22%	X		Study blood smears under a microscope
b				Take shorthand
c				Make drawings of airplane parts

MVII Dropout Minus Key(continued)

Question Number	% of Diff.	Like	Dislike	Item content
50a				Be a fingerprint expert
b				Be a weather forecaster
c	23%		X	Be an efficiency expert who improves shop procedure
51a				Set up electrical equipment on a movie sound stage
b				Draw plans for a large bridge
c	27%	X		Make a chemical analysis of a new product
57a				Repair torn clothing
b	22%	X		Wash and polish an automobile
c				Adjust a carburetor
66a	27%	X		Learn to play golf
b				Learn to cook
c				Learn to use a news camera
90a	20%	X		Be a hospital attendant
b				Be a bank teller
c				Be a toolmaker
92a				Spend an evening meeting new people at a social club
b				Spend an evening just chatting with a group of friends
c	20%	X		Go to a hockey game
95a				Get a job in a factory
b				Get a job in a retail store
c	24%	X		Go to school

MVII Dropout Minus Key (continued)

Question Number	% of Diff.	Like	Dislike	Item content
97a	27%	X		Raise poultry (chickens, ducks)
b				Repair shoes
c				Press clothes
98a				Take a machine apart to see how it works
b	25%	X		Assist a doctor at the scene of an accident
c				Teach someone who to use a machine
99a				Play poker
b	36%	X		Play basketball
c				Play checkers
107a	36%	X		Work behind a soda fountain
b				Type letters from a dictation machine
c				Check supplies received against a list of those ordered
129a				Decode messages written in code
b	25%	X		Do blood chemistry in a medical laboratory
c				Assist in research on automobile design
130a				Take photographs of your friends
b	20%		X	Write a popular article on how a diesel engine works
c				Plan a recreation schedule

MVII Dropout Minus Key (continued)

Question Number	% of Diff.	Like	Dislike	Item content
132a	26%		X	Study sheet metal pattern drafting
b				Study machine computation
c				Study physiology (how the body works)
133a				Operate a steam shovel
b				Run a gas station
c	23%	X		Drive an automobile
137a				Be a supply-clerk
b				Be a buyer of merchandise
c	22%	X		Be a laboratory technician
143a	21%	X		Be a physician
b	20%		X	Be a locomotive engineer
c				Write novels
153a				Mix pancake batter
b				Install a hot water heater
c	20%	X		Take part in a military drill

Appendix F

Interview guidelines and excerpts

AREAS TO BE INVESTIGATED IN INTERVIEWING FOR EMPLOYMENT STATUS AND CHARACTERISTICS

I. FAMILY

A. Living with both parents?
B. Father's occupation? Mother working?
C. Brothers and sisters -- ages, school status (DO), working?
D. How do your parents feel about school?

II. FRIENDS

A. Who are your three closest friends? Ages? Are they presently in school or working?
B. Are most of your present friends in school or out of school? Are they employed now? How do their jobs look to you?
C. Did any of your friends leave school (about the same time you did?)
D. Have any of your friends left school before graduating?

III. SCHOOL

A. What are (were) your grades? Are (were) you satisfied with them?
B. What advantages do you see in leaving school before graduation from high school?
C. What disadvantages do you see in leaving school before graduation from high school?
D. Would you advise your brother(s) and/or sister(s) to remain in school until graduation? Why?
E. What did (do) you like most about school? Like least?
F. If you could add or include anything to the school situation, what would you add? What would you eliminate? What type of courses are (were) you taking?
G. How do you feel about (1) teachers; (2) curriculum - courses; (3) administrators, counselors or other school personnel?

IV. VOCATIONAL

A. Do you now have a job? How long have you had this job?
B. Have you had a job in the past? How long were you employed in your first job? Why did you terminate?
C. Did you have any difficulty getting a job?
D. How did you get your first job? Your first full time job?
E. Do you have any plans for further training or education? If yes -- What?
F. Is there training of any type which you would like to be able to get? Could a school for adults such as a technical school help you?
G. How do you feel about the jobs your friends have?
H. What do you feel the school could have done to help you more in preparing for work? How could the employment services have helped?

V. VALUES

A. (1) What individual that you know personally or by reputation do you most look up to?
(2) What is there about the individual you would like to have as your own characteristics?
B. To what groups or organizations do you belong?
C. What five things do you believe to be most important to you (in life)?
D. What does "success" mean to you?
E. What kind of person do you think you are?
F. How do other people see you?
(1) Parents: Brothers and/or sisters?
(2) Friends?
(3) Teachers?

VI. GOALS

A. What are your plans or goals for the future?
B. How long a period of time do you expect it to take you to accomplish each of your plans or goals?
C. Generally, how far into the future should one plan?

VIII. GENERAL

A. What do you see as the difference between individuals who finish high school and those who do not finish?
B. If you were to pick one thing as your biggest problem, what would you pick?

AREAS TO BE EXPLORED IN INTERVIEWING FRIENDS

The following approach and line of questioning is suggested in your talking with the friends. Any "leads" which develop during the talk with the friend might be pursued at the discretion of the interviewer.

We are studying high school and recent high school students and their experiences and plans regarding school and employment.

Recently we talked to _________________. He said he knew you and thought that you would be able to help us. Would you mind answering a few questions related to school and employment? How well do you know ____________? Are you employed? In School? Course? When will you graduate? Have you looked for full time employment? Part time? Do you feel you had more or less difficulty than the average individual in finding work?

What do you think schools or employment services could do (could have done) to make your (coming) employment easier? What do you think the school (or employment service) could have done to make things easier for _________________?

Do you think ________________ will enroll in school or vocational training courses in the future? Why?

Interviews

The sections of the interview which follows comprise most of an interview with one dropout.

I. How do your parents feel about an education, did they want you to finish school?

S. They wanted me to finish school-high school and they also planned on me attending classes at Pitt with my mother working there I had tutition free and all I would have to pay would be books.

I. How far did you dad go in school?

S. He completed high school.

I. Anything beyond high school?

S. No, high school was the limit.

I. How far did your mother go in school?

S. Completed high school is all.

...

I. Would you say that most of your friends now are in school or out of school?

S. Most of them are out

I. Did most of them graduate?

S. No, most of them didn't graduate.

I. You mentioned ___ ___ before, he graduated didn't he?

S. Yes, well, I retract the last statement, a lot of my friends did graduate, quite a few like ___, close friends, did graduate and did go on to college -- about six of them.

I. The ones that are working now, how do their jobs look to you?

S. Well, about the only with a future that I know of is ___ ___, he has a good future in drafting, constructional surveying, anythings he wants to go into. The rest of us are more or less stuck where we are at.

I. Did any of your friends leave school about the same time you did?

S. No, most of them waited until the end of their senior year and if they didn't pass they quit after that. I was the only one in that period of time that left school.

I. Then there weren't too many of your friends that left school before graduation?

S. One ___ ___, is the only one that I can think of right now.

I. What were your grades when you were in school?

S. Average, or below, towards the end, they were most below, the last two years.

I. Were you satisfied with them?

S. No, but at the time I didn't care.

I. Any particular reason, that you can put your finger on for not caring?

S. unintelligible

I. The reason I ask, your mother working at the University of Pittsburgh getting your education relatively free this could seem a motivation.

S. I had no motivation, I just didn't care. I had no interest. I lacked answers and I lacked application. I didn't care.

I. Well, even though you didn't care, you weren't satisfied with your grades.

S. Well, I wasn't satisfied, yet I wasn't dissatisfied. It didn't bother me one way or the other.

I. In other words, it was a place to get in out of the cold.

S. That was it. I came here and half the time I slept during the last year and goofed off.

I. Did you see any advantages at all ___ in leaving school before graduation?

S. None

I. None at all?

S. No. Yet I have seen cases where there was no advantage at all from graduating and then I have seen one case where there was no advantage in the boy going to college. There is a boy I work with, he had his teaching degree in social studies and he worked in the same place I did but he was three or four years older than I was and was on a job that paid less than I was.

I. Did you ever ask him why he doing this rather than teaching?

S. Yes, because he could not find a job, out of state too.

I. Do you know what school he graduated from?

S. No, I know he quit at the end of the summer and enlisted finally in the service.

I. This wasn't just summer employment for him, this was a full time job?

S. No, this was a full time job and even though he was dissatisifed putting all that time and money into educating himself, he finally enlisted to get his service time over with.

I. Then to sum it up, there are no advantages in leaving school before graduation from high school.

S. No advantages as far as I can see.

I. What about disadvantages, in leaving school before graduation.

S. There are more disadvantages than there are advantages. Yes, I agree one is you can't even get into the mill anymore without a high school education.

I. I think we had better clear it up. You did get a diploma, didn't you ___?

S. I did get a diploma.

I. How was this ___?

S. From the state, I took the National Educational Development Test, I think I passed it with pretty good grades, so I got my diploma and the transcription of my grades the day I finished the test so I was able to get the job that I hold now.

I. Then you hold a state equivalency diploma?

S. True.

I. Would you advise your brother to remain in school if he ever started to talk about dropping out?

S. Yes

I. Strongly, or

S. Well, I would explain it to him as best I could and then let him make up his mind. I don't want to force anybody in that respect. Continuing your education or quitting. A lot of people tried to force me into taking courses. I was fed up with school to begin with.

I. What did you like most about school when you were going?

S. The friends that I had.

I. The social life in other words.

S. The social life, yes

I. What did you like least?

S. Well, the requirements that go with any school. Some of the regulations such as no smoking and other things, just common in every school in the United States. Every now and then someone mentions the way you wear your hair. I am a person. I hate to be told what to do. Even at work I am the same way. As long as I am doing my job, I am satisfied.

I. Do you think you might have to change your ways in that respect someday?

S. Possibly, but right now I can think of no ways that I would.

I. Would the military make you change your ways?

S. Yes, they would (laughs).

I. I would think you would have that hanging over your head right now.

S. I do.

I. If you could add or include anything to our school, if you had this power, what would you add?

S. Well, it is hard to say. I know I would try and eliminate some of the restrictions put on high school students here.

I. Do you feel that all high school students are adult enough or mature enough to lift these rules and regulations?

S. No, not all of them are and that is where you have to have the foresight. I have only ran into one person here at the high school that did use this foresight. You know, who could think a little bit and use a little consideration when it came time for discipline and time when it was to give someone a break when he deserved it, when he was convicted wrongly.

I. Who was this ___?

S. Mr. ___. There were a lot of people that didn't like him because he was a disciplinarian but he and I always got along good. Always truthful. He more or less understood. I mean, he would take the time to sit down and talk to you and try to understand.

I. What type of course were you taking?

S. I was taking the academic course all the way from the ninth grade until the 11th grade and then in my senior year I took shop because I felt, I was afraid. I thought I would do better in shop, the last year I took shop here, I learned nothing I hadn't learned in 10th grade at the previous school. I feel the shop course here is very inadequate.

I. What school did you attend before you came here?

S. ___ High School.

I. ___ High School? Do they have a shop over there?

S. Yes, very good, very good.

I. How did you feel about your teachers, ___, while you were here? What did you think of them?

S. They were people doing a job, that is all. They didn't mean anything to me. I meant nothing to them. Except I was a little trouble to them everyday.

I. What do you mean you didn't mean anything to them?

S. Well, when a teacher comes around and tells you that if you don't improve you will fail the course, I guess, half way through the year. You don't improve and he gives up on you and turns his attention to someone to put it to better use. Then you come to an understanding. You come in in the morning and you sit down. You sit down at the beginning of class and you sit there, you don't cause any trouble. You don't get into any trouble.

I. Did you put forth much effort in your senior year?

S. I put forth as little as possible. To stay in. To stay in, attended is all.

I. To stay in and attend, not to pass?

S. I was told a few times about it.

I. How did you feel about the administration, the principals?

S. Well, I couldn't say I, yes, or no. I was more or less on the wrong side.

I. How did the counselors treat you?

S. Well, the counselor I had wasn't used. Mr. ___. They treated me the same as most of the teachers did. I was -- To them I was more or less one of the symbols, the bad pupils. Someone, you know, every school has them. The undesirables. That is exactly what I was and I was content that way. I didn't care.

I. It didn't bother you being termed an undesirable?

S. That is right.

I. Do you think if one of the counselors, teachers had taken you under their wing, do you think you probably would have finished?

S. No, I don't, because there were one or two teachers that I liked and enjoyed being with. One fellow especially, now and then he would stop down at the pool hall and we would shoot a game of pool. He was that type of guy. Nice fellow you know. He understood. He was just out of college fresh. More or less, he had a younger attitude towards us, didn't go by the book. He tried to help me, tried to make me understand. He couldn't. There were a number. I was just too stubborn and hard headed. I still am today. A guy told me that at work today.

I. You have a job now, ___, how long have you had this job?

S. Since last May. It is going on nine months now.

I. Where?

S. In ___ ___, located in ___ ___, a division of ___ ___.

I. What is your job? What do you do?

S. I am a machine operator. I run a vertical lathe-commonly called a bench drill.

I. Have you had any jobs previous to this?

S. Yes, I did. When I was in high school I worked the last year, the last year and one half I worked for a hamburger company. ___. I worked from the bottom to head clerk which was an easy job but it doesn't pay enough.

I. Is this the reason you quit?

S. Yes, it was the only reason. When I quit there I had a job where I went in, I was the boss. I was the only one on duty. I was the boss of the rest of the guys. I would sit around the office, take readings off the registers, do book work, count money, things like that.

I. Did you have any difficulty getting that first job?

S. No. Actually, it wasn't my first job. I had worked in a shoe store before that--started out stock boy, salesman. It didn't pan out. I didn't have a car and it was too much trouble. I went to work at ___.

I. How did you get your first job?

S. Walked in the store with a friend buying shoes, I talked to the fellow. I didn't know at the time that he owned the place. I mentioned that I wasn't working; he needed someone and I went home and I stopped, well, I didn't stop but this fellow I was with knew the man owned the store. Well, eventually, he found out where I lived. He got my address. He called me about an hour after I got home and asked me if I wanted the job. I hadn't thought about taking it and he said from the way that I talked, they way I acted he thought I was suitable. Well, I took it on a temporary basis and it didn't work out and I would have liked it. It wasn't that hard, steady hours. It was enjoyable. I needed a job.

...

I. At the present time, do you have plans for further training or education?

S. No, none what so ever. Well, lets put it this way. I would like to find a place where I could get a machinist program and start as an apprentice. Start somewhere as a tack welder, where they pay you to work your eight hour day and send you to school in the evening and paying you so much for that which-- ___ does that now. But I haven't applied.

I. Why haven't you applied at ___? They are advertising everyday on the radio for men.

S. Well, the only thing is where I am working now is steady. It use to be the old ___ ___, it has been there for a long time. Where ___ right now is hiring a lot of men but you can't tell how long it will last. They guarantee you work for one year. After that you can't tell what is going to happen. They have hired I don't know how many hundreds of people. They had this 10 million dollar project for ___. But who knows what will happen in five years. I may be out of a job and I will be five years older than I am now.

I. Well, have you ever thought that it would be to your advantage to take the training for a year, for security. You are young enough. Your family isn't too large and if you didn't have a great deal of ability, you could move most anyplace for welders or any trade you got there.

S. That is true but I don't know. It is up to me and I guess I hadn't thought of it that much. It wouldn't cost me that much for the welding education. I could just quit and go someplace else. I had a chance. I didn't really have a chance. I knew a person that works in the personnel department for the Navy propeller plants and they have the type of work I would really like but the thing is it is too far to move. You would have to work your way up. It is clean work, hard, but it is clean. It is pretty nice from what I have been told.

I. What do you mean you would have to work your way up? You don't propose to start at the top do you?

S. No, I mean you start out on a waiver and you are there a month or so and they put you to doing jobs here and there. Someone would be running the static tester, things like this and you can get a pretty good job out of it. Civil Service, a lot of benefits.

I. Do you think you will think about this ___ siutation?

S. Yes, I think I will. There are three different jobs I might have, one with ___ ___, one with any of the airlines, but right now I am waiting to see where I am if I am a little bit older, you are more apt to be hired. They don't want any young kids.

I. Is there any particular training of any type that you would like to be getting?

S. Well, like I said, right now the training --it would be a vocational one, welding, or machinist.

I. Do you think a school for adults such as they have down at Aliquippa would serve your purpose?

S. What type of school is that?

...

I. Have you ever taken advantage of any of the employment services here public or private?

S. No, I have never been to the employment service and I have never collected an unemployment check or relief or anything in my life.

I. Well, what I had in mind here was the Pennsylvania Employment Service. This might be a good thing for you to look into right now. Your changing jobs (unintelligible)

S. Well, that is one of the reasons I hesitate about ___. The minute you walk in there-I have a high school equivalency diploma and they want to know what good will you be to us? I say well, I am a machine operator. They say, good I will put you on a machine. I don't want on a machine. I want to try to get away from a machine. I want to try to get away from production. That is one of the biggest problems in the mill there is. In piecework, someone is always breathing down your work.

I. They have personnel men, they will listen. You have proven yourself in another area, nothing ventured, nothing gained.

S. True

I. What individual do you know either personally or by reputation, do you look up to?

S. That is hard to say, does it have to be a relation, could it be a relationship?

I. Sure

S. Well, one for instance, my dad's brother. He has an aeronautical engineering degree. He is a test pilot for NASA. He is a civilian working for the government. He has one of the most fascinating jobs I can think of. It is good clean work. Well, just to see a few of the advantages; he is able to use the helicopter from the base to fly from his house to the base, which is about 25 miles, no trouble at all. He just takes any plane he wants off the base. He started at $10,000. Of course, he worked to get that degree. He was a good pilot in the Navy. He is really a smart person.

I. What is there about your uncle that you would like to have as part of your own makeup, part of your own characteristics?

S. Money

I. Well, that is not individual makeup.

S. Well, he is a serious person, in the respect that when ever he goes, he does something. I can't well-- It is not a respect that I have but I mean, this fellow can sit down and talk to you and really understand you but yet he is way above you. You know what I mean, like a lot of people, they can't do that. Really there is nothing I can pinpoint about it, he is just a wonderful person.

I. Do you belong to any groups or organizations?

S. The union

I. United Steel Workers?

S. United Steel Workers.

I. Would you think of the five most important things to you in your life?

S. Right now,--Well, my family, which comes first. I guess it would be my job. Then recreation which would be hunting and fishing combined and cycling. Motor cycling that is one of the greatest things I enjoy. Otherwise there is not much I do enjoy work, eat and sleep.

I. What does success mean to you?

S. Material wealth

I. What would it take to be successful?

S. That is hard to say, everyone has their own idea. I don't think as long as you live you are successful as what you want. If you do, I think there is something wrong with you. You can always go further than what you are. My idea of success right now, is to get higher, moneywise, material wealth and everything else, better job, better living.

I. You mentioned that one of the most important things is family, material wealth, recreation, including hunting, fishing, and cycling.

S. I didn't know what you wanted.

I. What about something like community respect?

S. Well, the community as far as I am concerned, if they don't bother me, I won't bother them. That is the way I feel about all my neighbors too.

I. What kind of a person do you think you are?

S. Well that is another hard one as far as I am concerned. It is hard to say. I know this, I am not too easy to get along with. If you treat me good, I will treat you good. If I like you -- I like you. If I don't, I will tell you about it. I try to be straight and everybody feels I am a pretty mean person and pretty hard headed. Other than that I can't say too much. You could probably tell me more than that (unintelligible)

I. You mentioned you had a lot of friends though?

S. True. I am hard headed in learning something. If I want to learn, I can learn. I mean if it comes to showing me something,if I feel it should be done my way, I don't care if you are the foreman, or who you are.

I. Well, you started out as a stock boy.

S. True

I. You ended up as a salesman. You started out, as what was it?

S. As a clerk at ___.

I. As a clerk at ___. You ended up in charge of the whole operation.

S. That is right.

I. You started out as a machinist up here at __________.

S. I started out as a low clàss laborer and I worked my way as a scrapper and on to the machines.

I. You can perform and you can learn readily.

S. Not that I can conform. It is that I learn readily and I want to advance myself. I don't want to conform. The same in the shoe store, the same at ___ and the same at the mill. They gave me a job to do and I did the job. Whether I did it my own way or their's as long as I got the end result. Now at ___ there was a thing you had to worry about -- your appearance working in a restaurant,but in the mill it doesn't matter. I can go in there greasy and dirty and leave greasy and dirty.

But even so, they give me the job to do and I go about it and I do alright. That is why when I first started there I had a better job I felt. I see that today. I was grinding stones. I go around all day and dress them in different shops, check the guards, different things like this and I had to collect stuff from the store room, stock different departments. Certain amount of stuff I had to do everyday. I took my time and I did it. If I finished early, they would give me something else to do.

I. In the light of all you told me about yourself, what kind of a person do you think you are now?

S. Same as what I told you before, I mean I will work if I can see a place where I am going to get ahead. But right now, the job I am on, it would take me eight years before I get any further. I am fed up with the job. The only way I will make any more money if the union goes on strike when the contract runs out.

I. What do you think your parents opinion is of you right now?

S. Well, it is not too high. I quit school. I am working in a mill which in there opinion isn't a good job at all. But my opinion, somebody has to work in a mill, someone has to do this work, the dirty work, make the steel and everything for the country. Not everybody can work in a real good high class job. I wouldn't say it is real low, it is an average opinion. I do things wrong and I do things right. That is about it.

I. What about your friends, what do you think their opinion of you is?

S. Well, it has to be good or they wouldn't be my friends. Right?

I. What about your teachers?

S. It wasn't a very good opinion. I never did anything to make them have a good opinion. I never went all out for them. I never went all out for anything.

I. I think you have good insight into yourself, ___, real good. I think you have yourself pretty well figured out.

S. I wish I felt the same way as you do. If I knew exactly what I wanted to do.

I. I don't mean knowing what you want to do. You know what your good points are and you know what your limitations are. Where you have gone wrong, why you went wrong, you know you can do well, how you have done it well. Obviously, you have done some thinking along the line.

S. Well, that is true but even so there are things I can't do and knowing I can't do them hasn't helped me. I mean, sure I would like to be able to tell my wife and the kid, sure we will live in my parents' house and I will go to school and I will work on the side, this and that. I don't want to do that I want to make it on my own. I may be sorry in the long run but that is the way I figure.

I. Do you have any plans or goals for the future right now?

S. No just what I said before. Find a better job. Not a better job--just one that I like better. One that pays about the same or higher if possible, and save a little money, maybe make a downpayment on a home.

I. Would you tell me what you are making an hour now?

S. Right now I am making $2.88 an hour plus incentive. In other words, anything over dayrate, they give you so many pieces you cut. You have to have 750 for day and anything over dayrate is yours. They average what you make. If you really work the most you make is 750. You figure the most I make is 25 dollars a day. The most you get is 750. Now and then we make four or five dollars, we figured if you make $2.50 a day that is 50 dollars a month. You figure people that work in office jobs wait six months for a $10 raise.

I. How long a time do you think it will take you to get where you want to be? To accomplish your plans and goals? You didn't tell me what your plans or goals are but you very definitely have some.

S. Well, I don't know. I wouldn't tell you know. I haven't been married that long really. Plans and goals. Everyone wants to be rich. Sit and enjoy life but you can't do it. Well I will tell you one goal I would like to have. I would like to open my own business. Some branch of my own business. But the thing is you have to have the initial investment and that is hard to get.

I. How far into the future do you think a person should plan?

S. Me, I plan about a month or two months ahead. That is about all. Right now. Eventually, as I get older it will be further ahead. I will look ahead for my boy and this and that. The way I see it now, I have no future plans on the job I have because I will be there. I may move to another machine, a little easier maybe but I won't make that much more money. I just have to work and go along. What ever I say, maybe I will change it.

I. What about a future plan to move from this job into another area?

S. Well, there I may advance myself that I can look ahead and say well, 20 years from now have a home payed off, have money saved that is mine. I would be able to move around a little bit. I will have something to work with which I don't have now.

The portions of the interview quoted below were from the protocol of a persister. Throughout the interview he sounded very much like a dropout. Only in the last few lines of the interview were characteristics of a persister noted. Earlier in the interview he said that his smart friends were out of school and working, his grades were average or below, the school had too many restrictions, classes were boring expecially history and English, students are always considered to be wrong, most teachers never listened to students, and there is no one whom he admired. Then with an extra push the interviewer reflected "There is nobody?" and followed with "Is there somebody that you think you would like to be as he is?"

S. You mean a teacher?
I. Anyone you might know.
S. Yes, the biology teacher. He is smarter. I would like to be as smart as he is. I would have to go to school for about 50 years.
I. Are there any characteristics about him you would like to have as your own.
S. Just keeping people interested in what he is talking about.
I. Anything else that you like about him?
S. He knows what he is talking about. When you know what you are talking about it makes it easier to listen to.

...

The interviewer continued with another line of questions and the persister continued to sound like a dropout. He tried to join one social organization but did not belong to any now. He thought teachers thought he was a juvenile deliquent. Then the interviewer turned to planning for the future.

I. What are your plans and goals for the future then?
S. Get a decent job, one that pays good, get married someday maybe. That is about all.
I. How long do you think it will take you to realize your goals?
S. Not for a good while, at least till I am 21.
I. 21? You will have fulfilled your goals in life? Generally how far into the future do you think people should plan?
S. How far they should plan? Shouldn't plan too far ahead because they might not be around. About five years I guess.
I. Five years?
S. Well, if you are in school yet, I would plan just till I am out of school the first year. If you are married or something and planning for your family, I would say about five

years.

I. Why do you feel some students leave school before graduation? What do you feel is the biggest reason for leaving school before graduation?

S. Teachers.

I. Teachers?

S. They get on your nerves, give you too much homework. You can't do it in the amount of time. This gets you down.

I. Is there anything else you think teachers do that may contribute to student's leaving school?

S. They are too boring. Most of them are really poor. You go to class, you end up falling asleep and then you end up in an argument with the teacher.

I. What do you see as the difference between persons who leave school before graduation and those persons who finish school?

S. Well, it depends on how you look at it. I have gone 11 years and I am not going to quit now and if they have gone up until high school. I feel like sometimes dropping out myself.

I. You say you do feel this way?

S. Oh, yes.

I. Why do you think?

S. Well, that is just it. I have gone 11 years, I am not quitting now.

I. Any other reasons why you stay in school.

S. Well, it will make it a lot easier on me to get out with a diploma.

Appendix G

Names and locations of individuals assisting in the collection of Phase Two subject data.

Name	Location
Gerard J. Adams, Jr.	Hawley
James W. Alexander	Corapolis
E. Brenneta Andrews	Pittsburgh
Dale W. Bangs	Boyertown
Violet K. Barom	Philadelphia
Donald E. Beck	Beaver Springs
John L. Bennett	Kingston
George L. Bernlohr	Butler
Amelia B. Bingham	Pittsburgh
John R. Bonfield	New Castle
Donald E. Buxton	Allentown
Mary A. Capallo	Reading
Thomas F. Carr	Dallas
Braxton G. Clark (Mrs.)	Philadelphia
Robert P. Coury	Pittsburgh
Sarah R. Davey	Pittsburgh
Gerald G. Depew	Lancaster
George DeSau	Bellefonte
Betty Dodd	Allentown
Paul C. Ehrhart	Millersville
John M. Fanning	Folsom
Dorothy E. Filer	Allentown
Kirk L. Fisher	Altoona
Dina Freeman	Philadelphia
Martin Goldberg	Philadelphia
Rosaline Goldin	Philadelphia
Leo A. Goode	Pittsburgh
Frank D. Greco	Bristol
A. James Gross	McKeesport
Joseph E. Haage	Reading
Elizabeth J. Hand	Pittsburgh
Natalie C. Hirsch	Philadelphia
Beth Holt	Erie
E. Steele Houchens	Havertown
Howard M. Jones	Philadelphia
John P. Kennedy	Pittsburgh
Curtis Kerns	Washington
Ernest G. Koegel	Lehighton
LaTour C. Koegel	Lehighton
John Koleser	Cornwells Heights
Miriam W. Kreitner	Hawley
Albert Lerch	Northampton

Name	Location
George M. Leute, Jr.	Havertown
Margaret A. Lewis	Reading
Jean B. Lipschutz	Philadelphia
Phyllis D. McClain	Greensburg
George McConnell (Mrs.)	McKeesport
George McCutcheon	Dallas
William U. Means	Pittsburgh
Doris Meisenhelter	Millersville
Peter J. Mervosh	Pittsburgh
Samuel A. Miller	Allentown
Daniel E. Moore	Pittsburgh
John W. Moore	Saltsburg
Evelyn L. Naylor	Slatington
Flora L. Obrecht	Northampton
John S. Osen	Chambersburg
George R. Pew	Lancaster
Allen Rank (Mrs.)	Laureldale
Joan L. Riehl	Lititz
Florence D. Rose	Philadelphia
Jean S. Rosenzweig	Pittsburgh
Louis Rossi	Pittsburgh
Doris L. Sams	Greensburg
Peter P. Schneider	Northampton
Thos. M. B. Schrader	Allentown
Harry Scott, Jr.	Kingston
Judith A. Scott	Pittsburgh
Raymond R. Serfass	Stroudsburg
Robert L. Shuman	Robesonia
Joseph F. Sicchitano	Lewistown
Zara L. Siegel	Washington
Joseph P. Skirtich	Pittsburgh
Martin A. Trichtinger	Pittsburgh
George J. Vlasic	Butler
Harold Whitney	Philadelphia
Sidney B. Willar	Robesonia
Kenneth Williams	West Mifflin
Albert J. Yedlicka	Pittsburgh
Jane M. Yoder	Hamburg
William A. B. Young	Camp Hill
Peter Zafferopoulos	Pittsburgh
Mary Zetler	Claysburg
George Zurick	Bellefonte